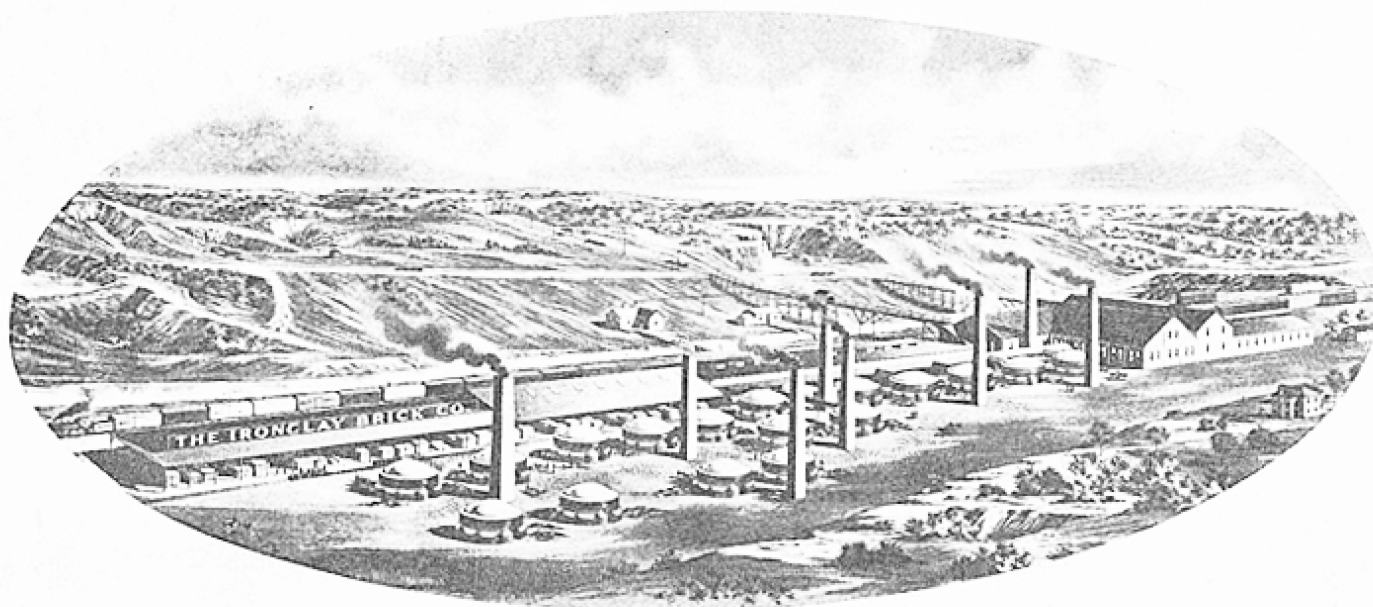


# **An Archaeological Study of the Rock Run Reclamation Area, Coal Township, Perry County, Ohio**

**By  
James L. Murphy**



THE IRONCLAY BRICK COMPANY'S PLANT.

**Contributions to Ohio Ceramic History**

**No. 12**

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## FOREWORD

Plans by the Ohio Division of Mines and Reclamation to reclaim portions of the Rock Run Gob Pile in Section 20, Coal Township, Perry County, Ohio, resulted in a Phase I Literature Survey and Archaeological Field Survey conducted by the author and submitted in June, 1997 (Murphy 1997). The recommendation of that report was that the ca. 9.76 acre site had been so heavily impacted by a series of mining and industrial activities as to render any further archaeological studies redundant and unnecessary. Nonetheless, it is believed that the background history and findings are of sufficient interest to justify making this version of the report more readily available.

A recent visit to the site reveals that some features noted in the original report remain, most notably the standing wall of the Ironclay office building. Much of the actual reclamation involved gob and strip mining to the east of Rock Run, so that some of the structural remnants associated with the brick industry have been preserved. It should be noted that while much of the surrounding area is in Wayne National Forest, the Rock Run flood plain here, including the Ironclay plant site, remains private property.

Copies of the original report are available at the Ohio Historic Preservation Office and the Ohio Department of Natural Resources.

## ABSTRACT

A Phase I literature survey and archaeological field reconnaissance of a proposed reclamation area along Rock Run in Section 20, Coal Township, Perry County, Ohio, which would impact an area of approximately 9.76 acres, has been conducted for the Ohio Division of Reclamation.

Review of the literature, including the Ohio Archaeological Inventory forms and the Perry County file housed at the Ohio Historic Preservation Office, the National Register of Historic Places, and the standard archaeological literature and relevant contract archaeology reports pertaining to Perry County revealed no known archaeological or significant historical sites existing within the project area, although remains of the Ironclay Brick Co. plant, which is the focus of the present study, are apparent to anyone examining the site.

Actually, the area is known to have been heavily impacted by a succession of mineral industries, including coal mining and a series of brick companies. The primary purpose of the present study is to document these industries and to determine the extent and significance of their physical remains, particularly, in so far as possible, in terms of potential eligibility to the National Register of Historic Places.

It is concluded that while remnants of several features relating to the use of the tract by the Ironclay Brick Co. are locatable, their poor state of preservation, as well as the existence of better preserved and better documented brick plants in the general vicinity, and the generally poor visibility and focus of the site preclude eligibility to the National Register of Historic Places. Existing remains are documented in the present report but it is believed that further field study would not add significantly to our knowledge of the history of the project area.

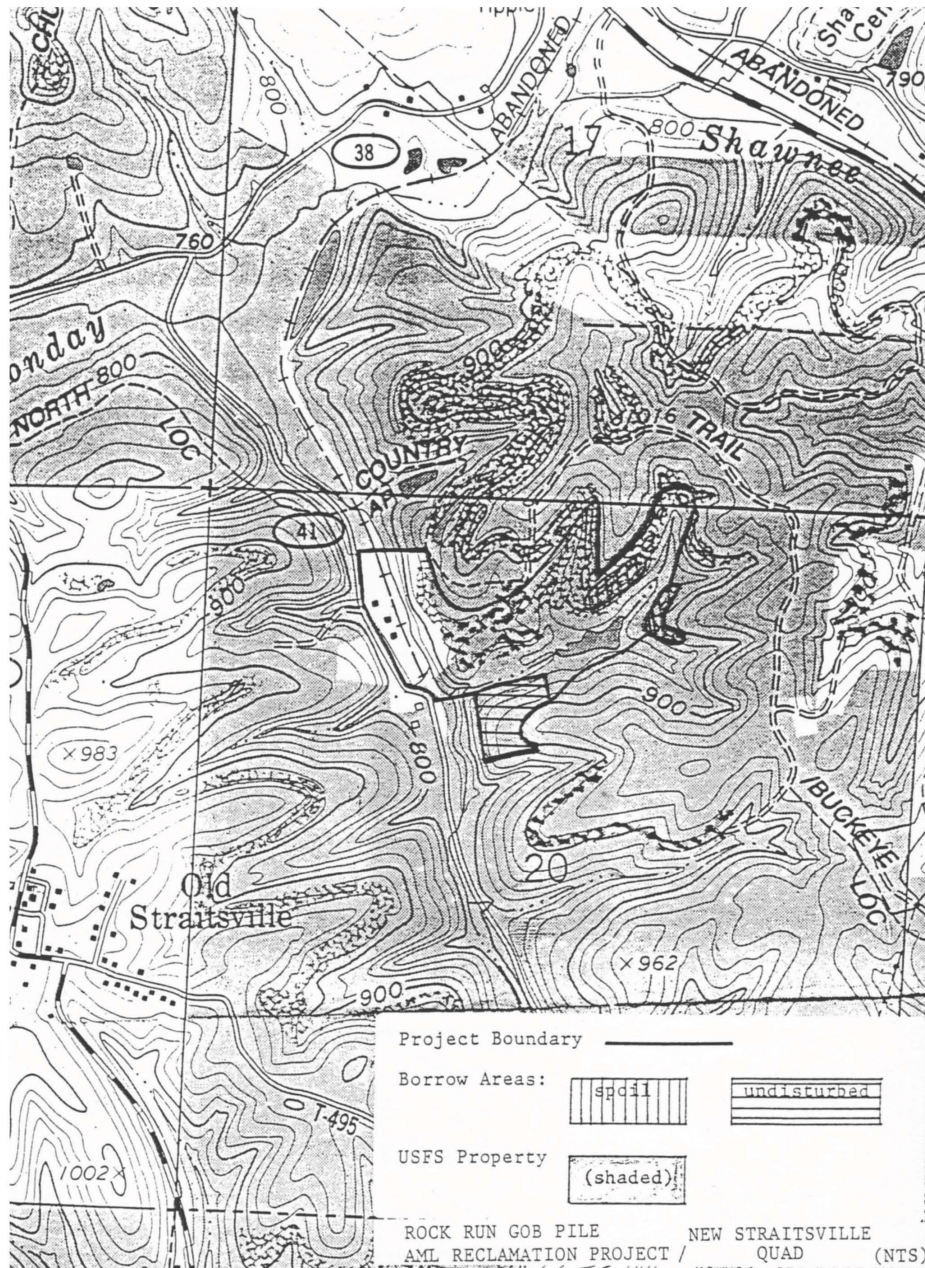


Map I. General Location of Project Area

## INTRODUCTION

A Phase I literature survey and archaeological field reconnaissance of a proposed reclamation area along Rock Run in the north-central portion of Section 20, Coal Township, Perry County, Ohio, which would impact an area of approximately 9.76 acres, has been conducted for the Ohio Division of Reclamation. More specifically, the project area lies along the northeastern side of Rock Run Road, approximately one mile northwest of the intersection of Rock Run Road with Route 93, a little less than halfway from the village of New Straitsville to the village of Shawnee.





**Map II**  
 Portion of New Straitsville 7.5' U. S. G. S.  
 Quadrangle Showing Rock Run Reclamation  
 Area. Present Study Limited to Unshaded  
 Area East of Township Route 41

Although a preliminary review of the literature, including Ohio Archaeological Inventory forms, the Perry County file housed at the Ohio Historic Preservation Office, the National Register of Historic Places, and the standard archaeological literature and pertinent contract archaeology reports relating to Perry County revealed no known archaeological or significant historical sites within the project area, the area is known to have been heavily impacted by a series of mineral industries, including coal mining and several brickworks. The primary purpose of the present study is to document the history of the physical remains of these plants, particularly, in so far as possible, in terms of potential eligibility to National Register of Historic Places.

## ACKNOWLEDGEMENTS

Dr. Jeffrey C. Reichwein, Ohio Division of Reclamation, conducted a pre-bid field conference that helped in formulating both

the scope and project design. Among those who have aided in developing the history of the project area, he and Ann Cramer of the U.S. Forest Service provided additional information on the area. Ms. Cramer also provided copies of aerial photographs and contacts with local informants. Of these, Thomas A. Lewis, Zanesville, and Jerry McTeague, New Lexington, were very helpful in providing historical background on the site. Lloyd Nixon, of Gore, Ohio, made available an important contemporary photograph of the Ironclay plant. Ronald Lehman supplied information on the later history of Ironclay Co., and Phillip Tefft, answered questions about the Claycraft Co.

## ENVIRONMENTAL SETTING

### Geology and Physiography

Rocks underlying the study area belong to the lower Allegheny Group of the Pennsylvanian System, of which the Middle Kittanning (No. 5)

coal is due to outcrop at approximately 900 feet A.M.S.L. The only natural outcrops of bedrock noted in the project area are portions of a massive sandstone visible along the east side of Rock Run, at the south end of the project area, along the west side of Rock Run Road, northwest of the project area and below Rock Run Road along the west-central portion of the project area. Small amounts of clay and shale were also noted along the eroded ditch along the road leading southeasterly into the gob pile area east of the project area.

The relatively rugged nature of the valley of Rock Run and its tributaries is due in large part to the fact that the southern portion of Perry County lies within the unglaciated Allegheny Plateau, which is also a factor largely responsible for the moderately rugged topography of much of the rest of the county (Fenneman 1938).

The comparatively unresistant bedrock of the lower and middle Allegheny Group, composed mainly of shales, clays, and thin sandstones, also contains a few thin marine units, including the Vanport limestone, which sometimes contains deposits of flint utilized by the prehistoric inhabitants of area, but the Vanport in this area is usually represented by "Ferriferous" or Baird ore, widely utilized during the heyday of the charcoal iron furnace. This stratigraphic horizon is too low to be exposed anywhere in the immediate vicinity of the project area, however. Flint also occurs in the Boggs and Upper Mercer Limestone units of the underlying Pottsville Group (Flint 1951: 31, 37-38), although these units do not outcrop near the project area.

Drainage of Monday Creek and its tributaries (including Rock Run) is typically dendritic and was not affected by Pleistocene drainage modifications although only a few miles to the west, the valley of Little Rush Creek and its

tributaries do show considerable effects of drainage reversal during the Pleistocene (Flint 1951:5-8). Because the project area has been so heavily impacted by historic industrial activity as to destroy any prehistoric archaeological properties that might have been present, the archaeological potential of the natural resources of area will not be addressed further in this report.

## Soils

A modern soil survey of Perry County was published in 1988 (Rubel and Tenny). According to it, the entire project area is mapped as “Mine Dumps.” Downstream from the project area, the valley of Rock Run is covered with ponded Melvin silt loam. Although a natural feature due to the low gradient of Rock Run, the resultant wetness has been enhanced by the activity of beaver, as a series of dams has been built across the stream, both above and below the

project area. Undisturbed areas of the valley walls adjoining the project area are mantled with Guernsey-Westmoreland silt loam of 15-40% slope, with the upper slopes covered by Bethesda channery loam. Guernsey-Westmoreland silt loams are moderately well drained to well drained silts formed on strongly sloping ridges and rounded ridgetops and hillsides, on shale and siltstone bedrock. Erosion has removed part of the original surface layer of these soils. Guernsey silt loam has a very dark grayish brown surface layer about three inches thick and a brown to pale brown subsurface layer about eleven inches thick. Westmoreland soil has a similar surface layer about two inches thick and a brown subsurface layer about three inches thick. This association generally occurs in areas unlikely to have been intensively utilized during prehistoric times, due to the steepness of slope and/or wetness.

## Flora

Gordon (1955) maps the project areas as having originally been covered by a mixed oak assemblage, most probably forests of white oak-black oak and chestnut oak-chestnut, with sour gum, flowering dogwood, and sassafras. Heffner (1939) provides a more detailed study of the vegetation of the Perry County area. Martzolff (1902: 40-41) is of interest for noting the dominance of oak, "with chestnut ridges in every township." In terms of the history of the project area, the flora is noteworthy for having provided abundant hardwood fuel (in the short term) for early charcoal iron furnaces such as Peter Hayden's Hocking Furnace at the present site of Haydenville. The Perry County iron industry, however, developed from Samuel Baird's discovery of the practicality of coal-firing such furnaces. A secondary use for the local forests undoubtedly was for mine timbers as well as



railroad ties, and Ronald Lehman recalls that the Ironclay Co. would utilize the old coal mine timbers for fuel, although the Middle Kittanning coal remained their chief source. The original forest cover in the project area has, of course, entirely disappeared. Although second-growth forest occurs along parts of the stream margin and to the north and south of the project area, the bulk of the project area itself consists of barren coal gob and brick refuse, with scattered sassafras, sumac, and similar "oldfield" species.

## Fauna

Gottschang (1981) furnishes a detailed modern account of the mammals of Ohio, while Martzloff (1902: 39-40) provides brief mention of some of the native mammals-- panther, wolf, wild turkey, prairie chicken, and passenger pigeon. Martzloff also gives a fairly detailed list of 113 birds of Perry County. Although Rock

Run surely was never a major source of fish, significant numbers no doubt once inhabited the waters of Monday Creek before it was destroyed by mine pollution, and the general vicinity was clearly capable of providing adequate subsistence for prehistoric man. The point remains moot, since the entire project area has been thoroughly impacted by historic industries that are the focus of this survey. The significant present of beaver, reintroduced into Ohio in the early 1930s, has been noted above, an abandoned dam being responsible for ponding along the northern edge of the project area and active dams existing along Rock Run upstream from the project area.

## HISTORICAL SETTING AND LITERATURE REVIEW OF PERRY COUNTY

Martzolff (1902) gives a fairly detailed though somewhat uneven history of Perry County, which was formed in 1817, named for

War of 1812 naval hero Oliver Hazard Perry and was later the birthplace of Civil War general Phil Sheridan.

Economically, the county is best known for its once famous mining history-- coal, clay, salt, limestone, and iron ore. Salt Lick Township was originally organized around 1823 and was named for the salt lick near the present site of McCuneville. Six miles square, the township was reduced in size when a small portion of one corner was added to the new township of Pleasant. Still later, Salt Lick Township was divided and Coal Township was formed from the southern part of it (Graham 1883: 302).

Agriculture has never played a major role in the economy of the region, being greatly overshadowed by the mineral wealth of the Hocking Valley coal and iron district. While Graham notes that "there are some good farming lands on the ridges, and also along the creeks, "

he quickly adds that "It is all, or nearly all, underlaid with a good article of bituminous coal. Throughout most of its history, this portion of Perry County has been primarily a mining district, based upon extensive deposits of the Middle Kittanning coal. During the latter part of 19<sup>th</sup> Century, it was also an important iron-producing region developed upon local iron ores processed by small, local iron furnaces. Clay deposits have also supported a long-lived industry, ranging from brick and tile to cookie jars and porcelain electrical insulators.

Shawnee, originally Shawnee City, was laid out at the terminus of the Newark, Somerset and Straitsville Railroad by T. J. Davis in 1872. The mining town grew rapidly. During the year ending June 30, 1873, the railroad shipped 115,881 tons of coal, nearly all of it originating in Shawnee (Tribe 1985: 49).

In 1875, exploitation of local iron ore deposits began with construction of Vilas, XX, and Fannie No. 1 furnaces at Shawnee. Originally, Vilas Furnace, built, operated, and named for Joseph Vilas (1832-1905) of Ogdensburg, New York, was first called Millie Furnace, placed in blast in 1877. A second stack was built in 1887, but by this time native iron ores were nearly exhausted; utilizing Great Lakes ore, the two Vilas or New York furnaces continued operating until 1900 but were dismantled in 1905. In 1871, construction of Fannie No. 2 furnace, also at Shawnee, was completed. The Fannie furnaces operated successfully until 1888, when the company failed. The furnaces were operated subsequently for several years by Newark interests but were dismantled in 1892 (Stout mss.).

New Straitsville was platted by John D. Martin in 1870. The town was called New Straitsville in order to distinguish it from the older town of Straitsville, located about a mile

away (Tribe 1885: 35). Primarily remembered as a mining town renowned for its famous mine fire set during the Hocking Valley Coal Strike of 1885 and as a center for moonshiner activity several generations later, New Straitsville also figured substantially in development of local deposits of iron ore and clay, as described in the following sections.

### Coal Industry in Perry County

Crowell (1995:193) has conveniently compiled statistics on annual coal production for Perry County (along with a cautionary note on the reliability of such statistics, particularly for the 19th C.). These are not reproduced here, but examination shows a slow but steady increase from 1815 (100 T.) to 1871 (80,555). The following year, 1872, shows a dramatic increase in tonnage (550,000), with a similar quantum leap from 1879 (616,588) to 1880 (1,445,572).

Perry County coal production first exceeded two million tons in 1892, and three million in 1918, presumably due to the war effort, and again in 1920 (3,700,511), the greatest annual production in the history of the county. Surface (strip) mining kicked in around 1917, with 103,090 T., but fluctuated rather erratically. The market for coal dropped following World War I, and the local economy did not pick up again until after the the Great Depression. Total annual production for the county first fell below one million tons in 1927 and did not rise above this mark until World War II. Production exceeded three million T. again in 1947, 1948, and 1950, but the area remained depressed during the 1950s and 1960s. A final blow came with passage of the federal Clean Air Act Amendments in 1990, and Perry County coal production dropped from 1,375,486 T. in 1990 to 196,484 T. in 1991, the lowest production since 1871. Today, with closure of Peabody Coal's large Sunnyside strip mine, coal mining is almost entirely a memory in

the Perry County region (although, ironically, small amounts have been stripped recently virtually within the village limits of Shawnee, by Allen and Imler (see Murphy 1994).

The two great leaps in Perry County coal production occurring in 1872 and 1879 are due, respectively, to completion of the Straitsville Branch of the Columbus and Hocking Valley Railroad from Logan to New Straitsville in late 1871, and completion of the Columbus and Sunday Creek Valley Railroad ("Ohio Central") to the new town sites of Corning and Rendville in 1879 (Tribe 1985: 35, 74). A slight but detectable increase in production from 1,759,790 (1891) to 2,055,895 T. (1892) probably reflects completion of a third railroad, the Columbus, Shawnee & Hocking Railroad (originally the Shawnee and Muskingum River Railway Co.), which proceeded southward from Zanesville to Corning, then westward to Shawnee, opening up the coal area of eastern Perry County, including Congo and Hemlock (Tribe 1995: 83).



Only the first of these three railroad projects is of immediate relevance to the project area. Completion of the Straitsville Branch of the Columbus and Hocking Valley Railroad resulted in the development of New Straitsville. Tribe (1985: 19) provides a succinct history of the development of this railroad project, originally dubbed the Mineral Railroad Co., which was chartered in 1864. The fledgling railroad project received considerable support from Lancaster residents, including Thomas Ewing and John D. Martin, the latter of whom made a fortune in mining centered around the town he was to found at New Straitsville, a settlement which he platted in the spring of 1870 on the former John Woodruff farm. As noted above, the town was called New Straitsville in order to distinguish it from the older town of Straitsville, located about a mile away (Tribe 1885: 35). Progress on the Columbus and Hocking Valley Railroad was slow, with rail service extending only from Columbus to Lancaster by 1868, but the iron

horse reached Logan in June, 1859, and on August 17, 1859, the first load of coal left Nelsonville for Columbus.

Concomitant with the building of the Columbus and Hocking Valley Railroad, Newark, Ohio, interests began plans to build a railroad to provide access to the Great Vein Region of New Straitsville and Shawnee. This effort, begun in late 1866, proceeded so slowly that in December, 1858, Logan citizens decided to build their own line, the Logan and Straitsville Railroad. Although this plan received little support in Perry County, it was soon absorbed by the Columbus and Hocking Valley Railroad, and the Straitsville Branch opened officially on January 2, 1871.

During the first month the railroad shipped 2,459 tons of coal from New Straitsville, and by September the amount had grown to 13,988 tons per month. This branch railroad produced rev-

enue of \$86,458.95 in its first year, which was more than half of the original construction cost of the line (Annual Report, cited in Tribe 1988: 37). In 1873 New Straitsville surpassed Nelsonville and became the largest coal shipper on the Columbus & Hocking Valley Railroad, although the Depression of 1873 set production back some.

Following World War I, the demand for coal dropped substantially, at the same time that strip mining and truck transportation began, factors that gradually spelled doom both to the local deep mines and to the railways, which depended almost entirely upon coal traffic, so that both are only a memory today, like the local iron industry (See p. 48 below).

### Clay Industry in Perry County

The following Pennsylvanian fire clays, in ascending stratigraphic order, have been important commercially in Perry County: the

Middle Mercer and Flint Ridge clays, lying just below the Lower Mercer limestone and utilized by the Straitsville Impervious Brick Co. and the Junction City Sewer Pipe Co.; the Tionesta Clay, used extensively in the Crooksville area, the Brookville clay, used by the Claycraft Mining and Brick Co. at Shawnee and by the Central Refractories Co. at New Lexington; the Lower Kittanning, utilized by the Ironclay Brick Co. and various potteries in the Crooksville area; the Lower Freeport clay, Central Refractories Co., Shawnee and New Lexington (Stout 1923).

The development of the clay industry in Perry County was dramatic, as indicated by the following statistics obtained from the annual reports of the Ohio Inspector of Mines. In 1888, only 45 tons of clay were mined in Perry Co. In 1898 (Ohio Inspector of Mines 1899: 95) there were 32,308 tons mined in the county, although Perry still ranked well behind Stark, Jefferson,

Columbiana, Summit, Muskingum, Athens, Hocking, and Tuscarawas Counties in clay output.

Clay mining also proved to be a dangerous occupation, as witnessed by the death of William B. Hughes in Ohio Mining and Manufacturing Co.'s Ohio Clay No. 4 mine at Shawnee. On April 18, 1898, Hughes was working in a room 17 feet wide, with a ten foot thickness of No. 6 clay. A 15 inch thick bed of black clay that generally stuck to the roof hung back six feet from the face of the room and extended fourteen feet across it. Hughes fired a shot in the white clay under this black bed and began working at the face of his room when the bed of clay fell upon him, killing him instantly. According to Mine Inspector Robert H. Miller, the "unfortunate man's head was completely mashed."

In 1913, Longdon's directory of U.S. clay product manufacturers listed 75 pressed brick companies in Ohio. Of these, the following oper-

ated in the Perry Co. area: Claycraft Co., Columbus; Ironclay Co., Columbus; Shawnee Flash Brick Co., Columbus; New Lexington Pressed Brick Co., New Lexington. It is noteworthy that the offices (and ownership) were based largely in Columbus and not locally. Longdon lists more than 500 manufacturers of common brick in the state, including these plants in the Perry Co. area:

Claycraft Brick Co.	Columbus
Shawnee Flash Brick Co.	Columbus
Corning Clay Mfg. Co.	Corning
Junction City Clay Products Co.	Junction City
Junction City Sewer Pipe Co.	Junction City
Rush Creek Clay Co.	Junction City
Ludovici Celadon Co.	New Lexington
New Lexington Press Brick	New Lexington
Straitsville Impervious Brick	New Straitsville
Iron Clay Brick Co.	New Straitsville
Atlas Brick Co.	Shawnee

Shawnee Flash Brick Co.	Shawnee
Ohio Mining & Mfg. Co.	Shawnee
Somerset Brick Co.	Somerset
S.E. Hightshoe	Somerset

Bownocker and Stout (1928) list 26 ceramic plants in Perry County, the following of which manufactured brick:

Belden Brick Co.	Somerset	Face brick
Central Refractories	New Lexington	Face brick
Central Refractories	Shawnee	Face brick
Claycraft (2 plants)	Shawnee	Face brick
Ironclay Brick Co.	Shawnee	Face brick
State Brick Plant	Junction City	Pavers
Straitsville Impervious Brick Co.	New Straitsville	Face brick

In contrast, only three brick plants are listed in adjoining Hocking Co.: the Hocking Valley Brick Co. paving brick plant at Logan; the face brick plant of the Hocking Valley Products Co. at Greendale; and the face brick plant of the Union Furnace Clay Products Co. at Union Furnace.

Flint's (1951) study of the geology of Perry County unfortunately provides very little information on the actual clay products industry. He does note that "Lower Kittanning clay was formerly used at the Ironclay Brick company plant west of Shawnee, Salt Lick Township, for manufacture of building brick, but this plant is no longer operating. "

Of particular interest to the present study are the plants closest to the Ironclay plant site: the Straitsville Impervious Brick Co., Shawnee Flash Brick Co., and the Claycraft Co., and an effort has been made to develop the history of each of these firms.

### Straitsville Impervious Brick Co.

The Straitsville Impervious Brick Co. began with a public meeting held in the New Straitsville K. of P. Hall on January 28, 1903. A subscription



of \$10,000 was sufficient to induce S. M. Gourd of Shawnee and the Thomas Moulding Co. of Chicago to form the company. This plant



### Straitsville Impervious Brick Co. (Gibson 1907)

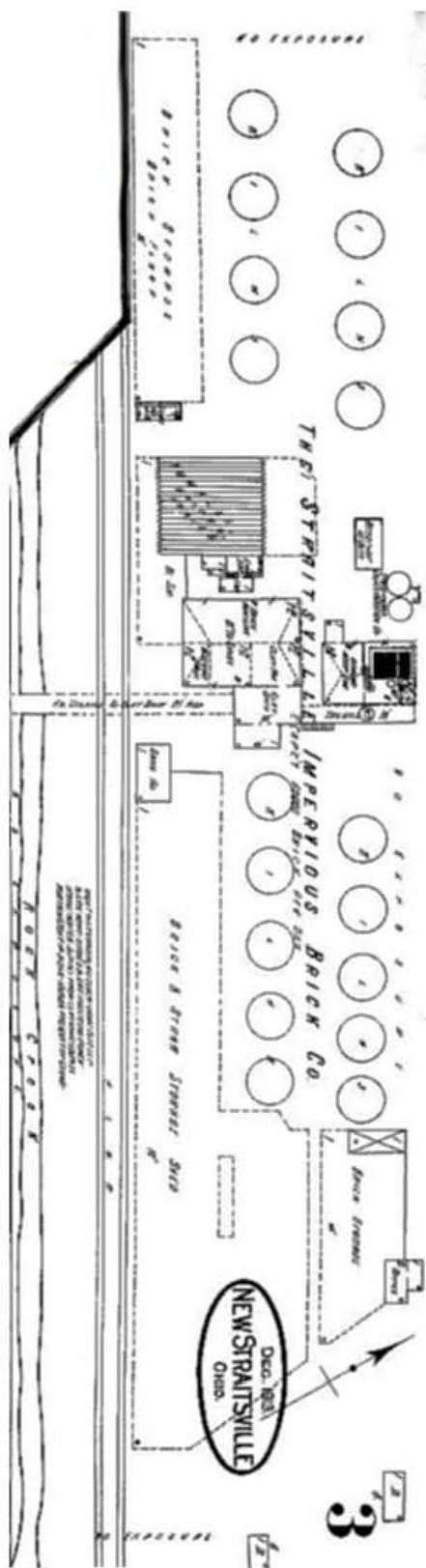
began operations in 1904, digging a shaft to the Flint Ridge and Middle Mercer clays. In 1907, the plant employed 45 men and had a capacity of 25,000 bricks per day. A total of seven kilns were then in operation. John D. Martin was the



The Straitsville Impervious Brick Plant  
(Undated post card)

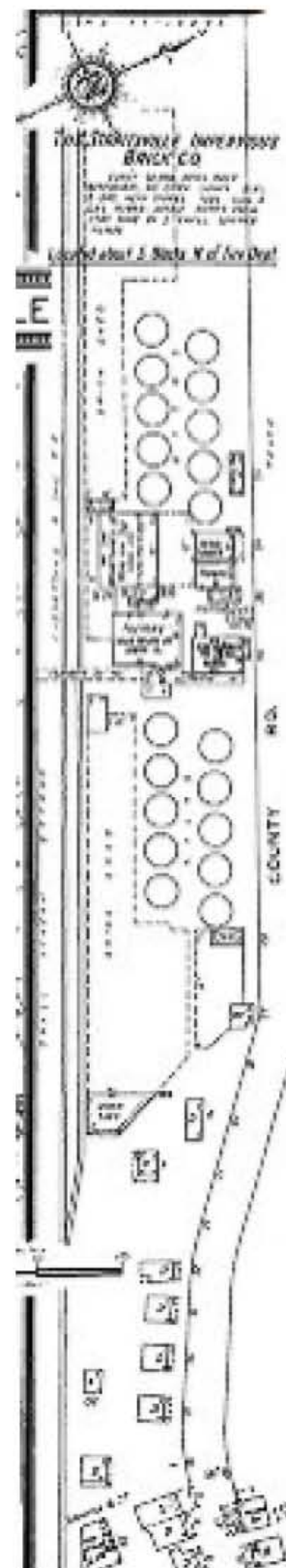
first superintendent, taking charge of the works in June, 1906. In 1915 the plant employed 75 people and, by 1928, 125 males.

Sanborn fire insurance maps are available for the Straitsville Impervious Brick Co. and indicate that it changed very little over the years between



1913

Map III



1933

1913 and 1933 except for the addition of two kilns (Map III). Operated by the Moulding-Brownell Corporation in 1934, the plant employed only 68 males by that time and in 1945 there were only 46 employees. The Columbus Clay Manufacturing Co. purchased the brick works in 1957 but after lying idle for some time they have since been dismantled. With removal of the kilns at the former Junction City Sewer Tile Co., there are no longer any beehive kilns still standing in Perry County.

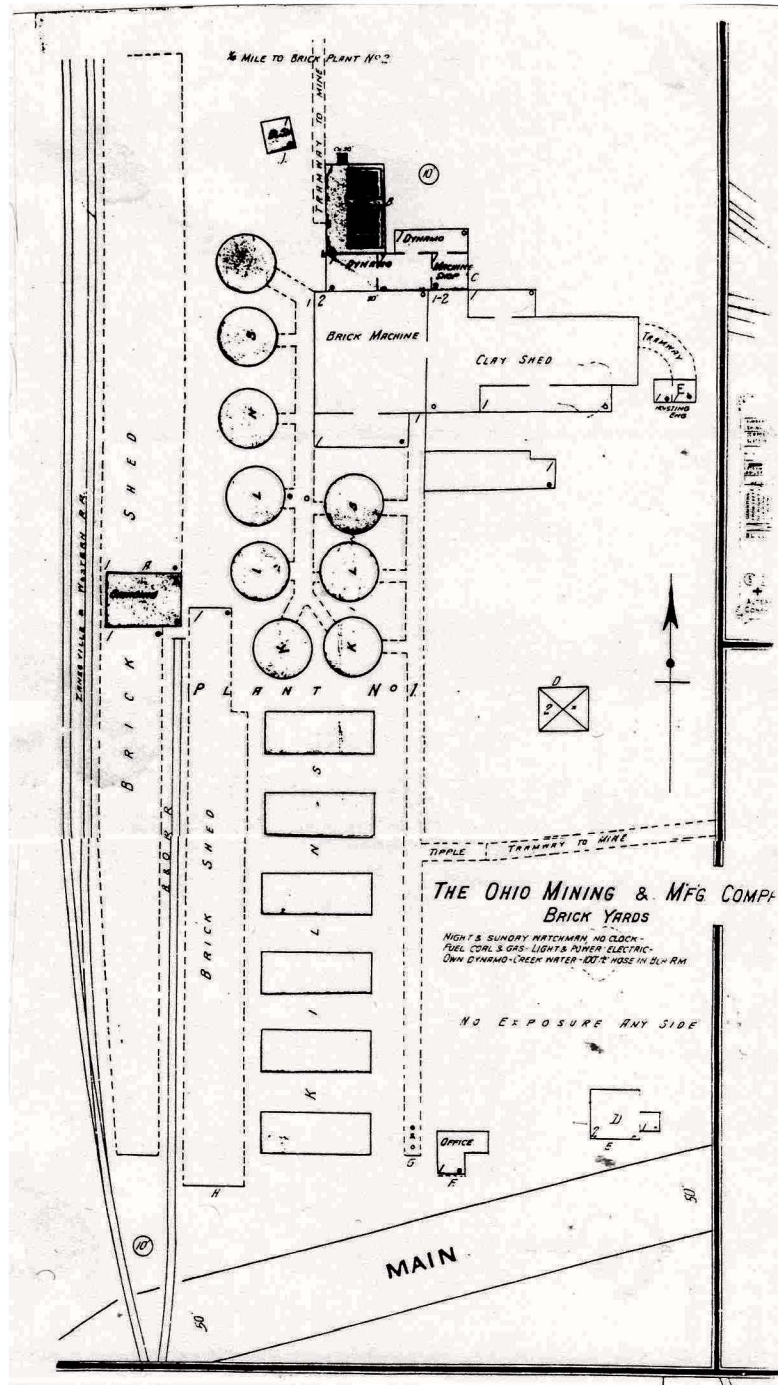
### Claycraft (Ohio Mining and Manufacturing) Co.

In its very first volume, the trade journal *Brick* (July 27, 1892) reported that "Shawnee will shortly have new brick and tile works." This announcement turned out to be a bit premature, as it was not until August 28, 1895 (Vol. 9 no. 4) that the journal could report that the "Shawnee Brick Co. started up last Friday and the plant is

now in full running order.” The plant was built by eastern capital at a cost of \$50,000 and had an initial capacity of 40,000 bricks per day, employing 100 men. It became Plant 1 of Ohio Mining and Manufacturing Co. (Map IV).

A very full account of the enterprise written in 1903 (*Brick* 19(1): 1-5) describes the facilities in great detail and enumerates six square Yates kilns with a capacity of 95,000 each, five down-draft kilns of 75,000 capacity each, and two small square kilns of 20,000 capacity. Water-smoking took about five days and burning three or four days. The product was described as a high grade brick in light buff, yellow buff, speckled buff, gray and speckled gray colors. A “beautiful iron mottled flash brick” was also produced. Eight million bricks were shipped in 1902.

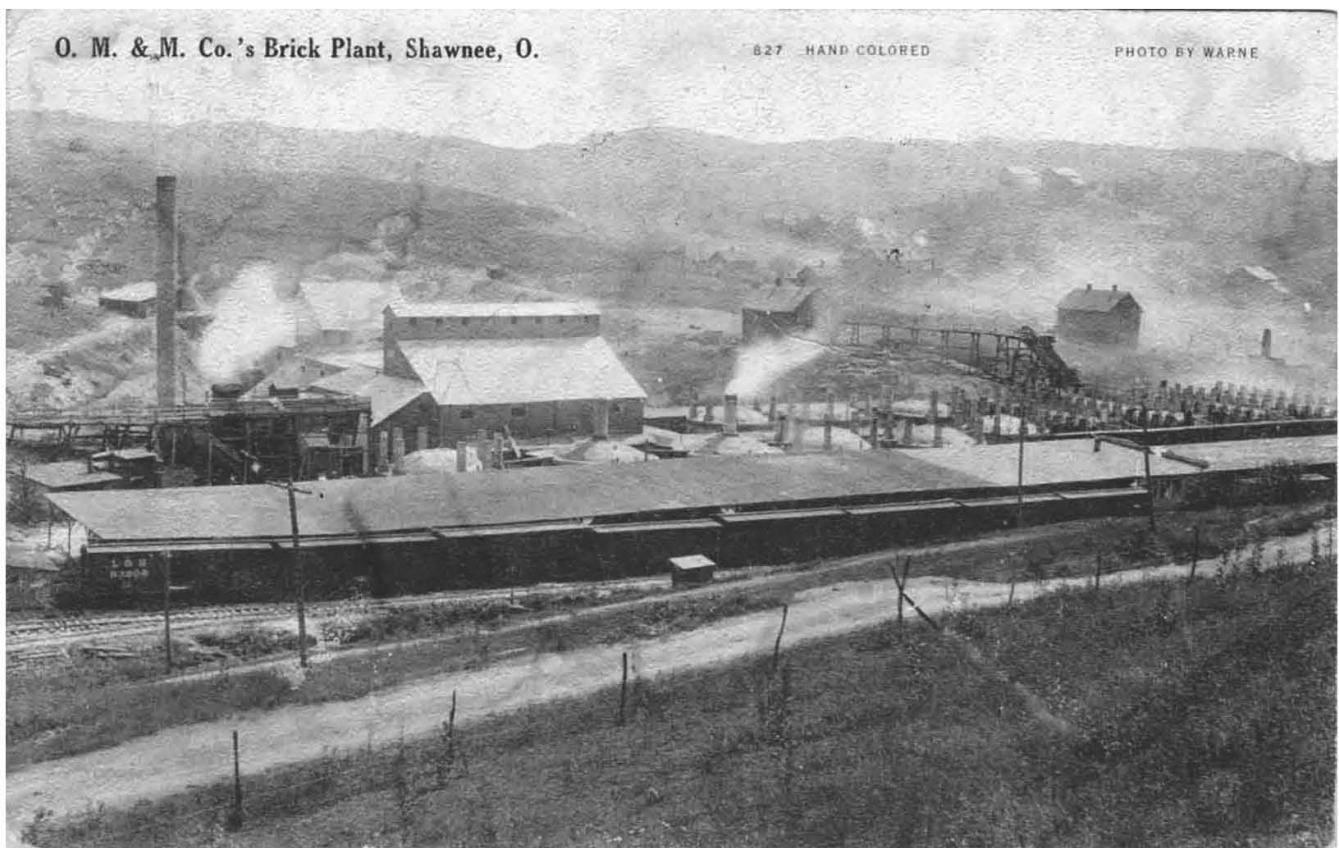
In 1907, the Ohio Mining and Manufacturing Co., as the company was formally known, was the leading industry of Shawnee, covering an



Map IV  
Plant 1 of Ohio Mining & Mfg. Co.  
(1910 Sanborn Map)

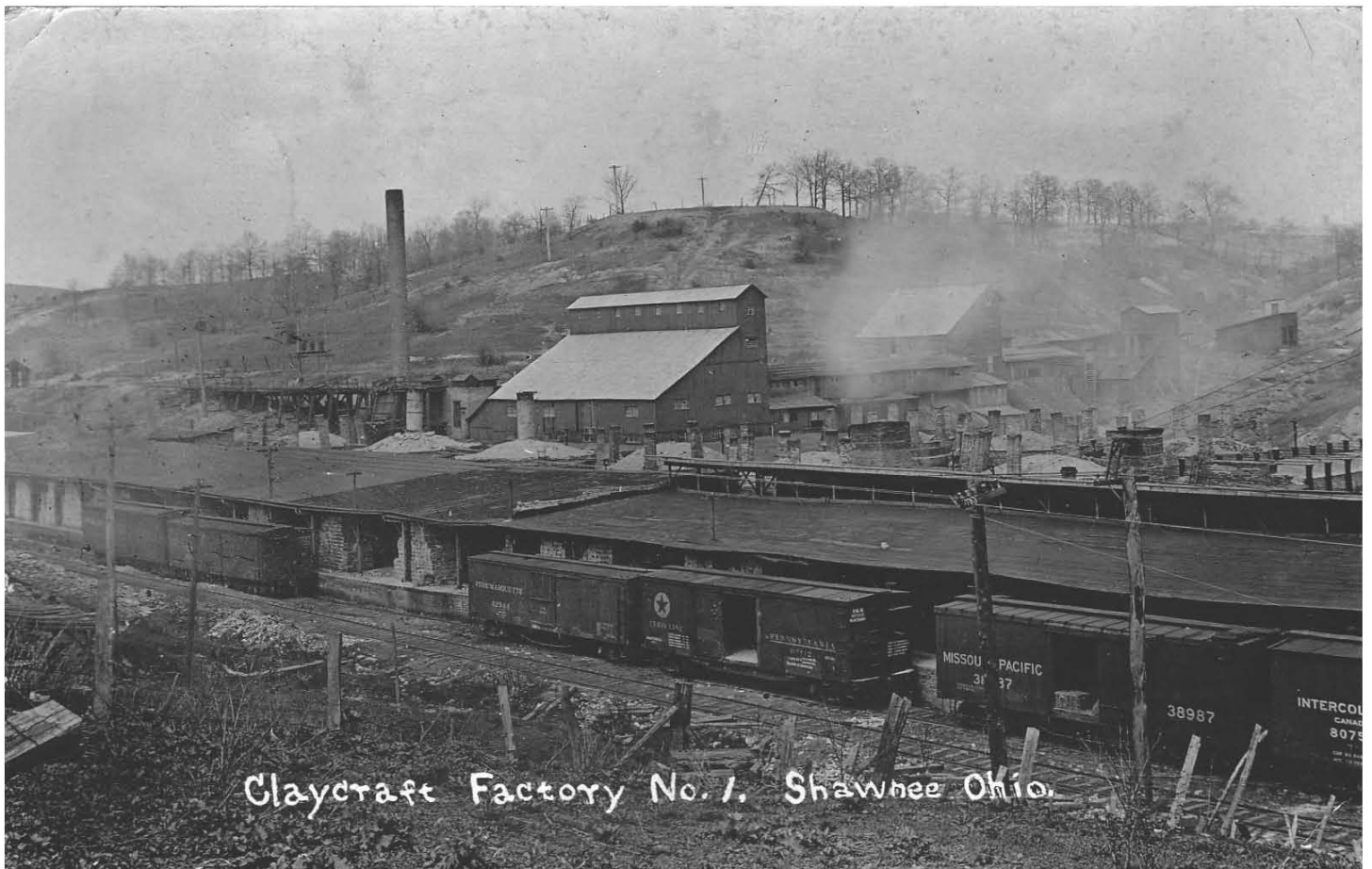


area of 26 acres, with ancillary holdings of 540 acres of coal and clay land. The company's Plant No. 1 manufactured "superior grades of dry press brick in a variety of colors such as buff, grey, speckled, and also an excellent iron mottled flash brick."



In 1907, there were fifteen kilns in operation, employing 150 men, with a daily capacity of 55,000 brick and an output of 40,000 bricks per

day. S. M. Gould was the first superintendent, but the plant was owned by New York or New Jersey interests, with William E. Davies as president; A. Lanfeare Norrie, vice-president; and Oscar Bunke, treasurer. Brookville clay was mined by a shaft of 54 feet.

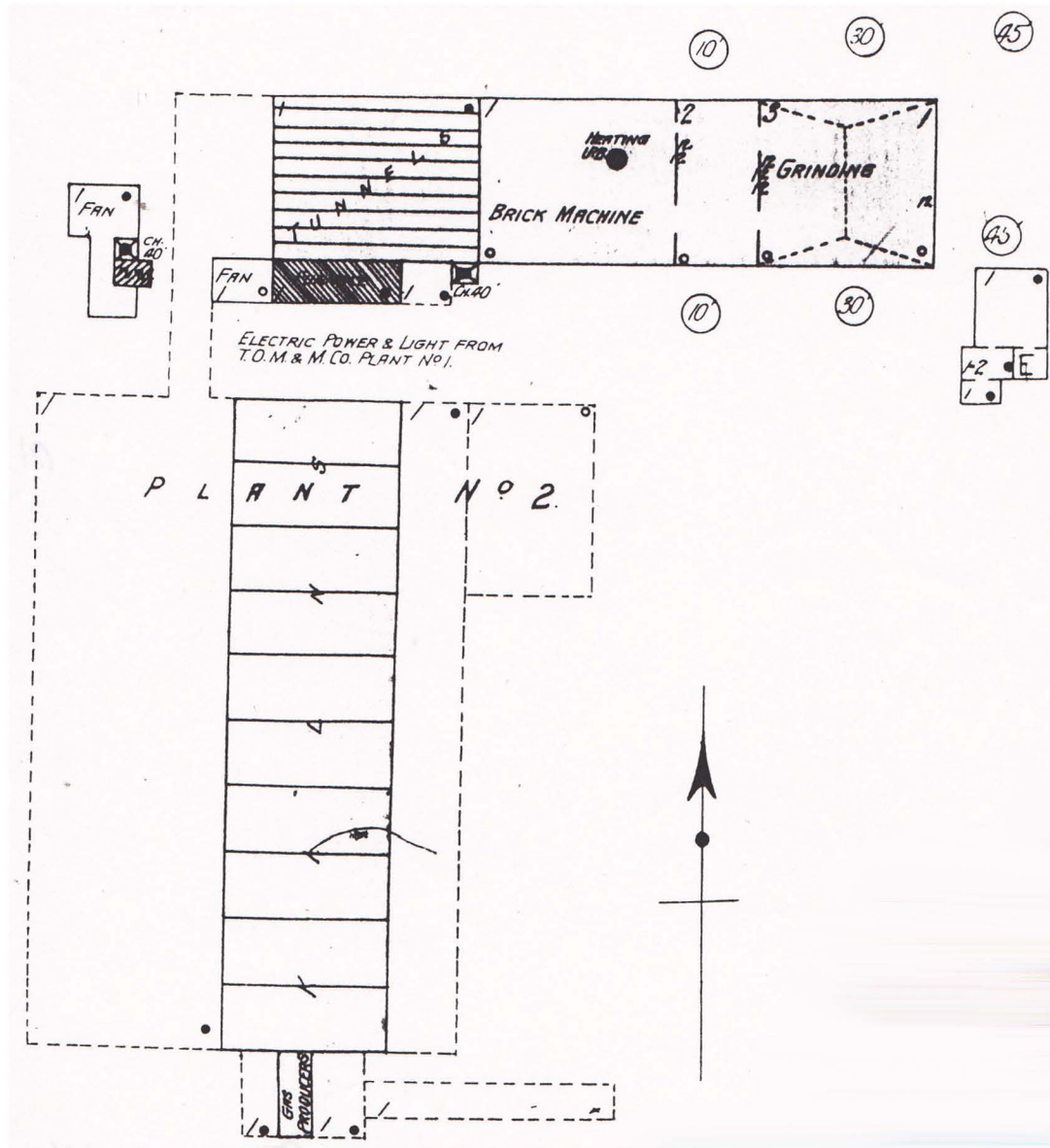




With the dismantling of the old New York Furnace in 1905, the O. M. & M. Co. developed its Plant No. 2 on the furnace site, to the north of Plant No. 1, making impervious brick by the stiff-mud process, using a continuous kiln with gas fuel with a daily capacity of 40,000 brick (Map V).

These two plants were eventually acquired by the Claycraft Co. of Columbus, in 1913, when William Hoagland of the Claycraft Brick Co., of Columbus, completed formation of the Claycraft Mining and Brick Co. with capital of \$150,000. The incorporators of the new firm were John W. and Elvord Kaufman, William A. Miller, and Fred A. Miller.

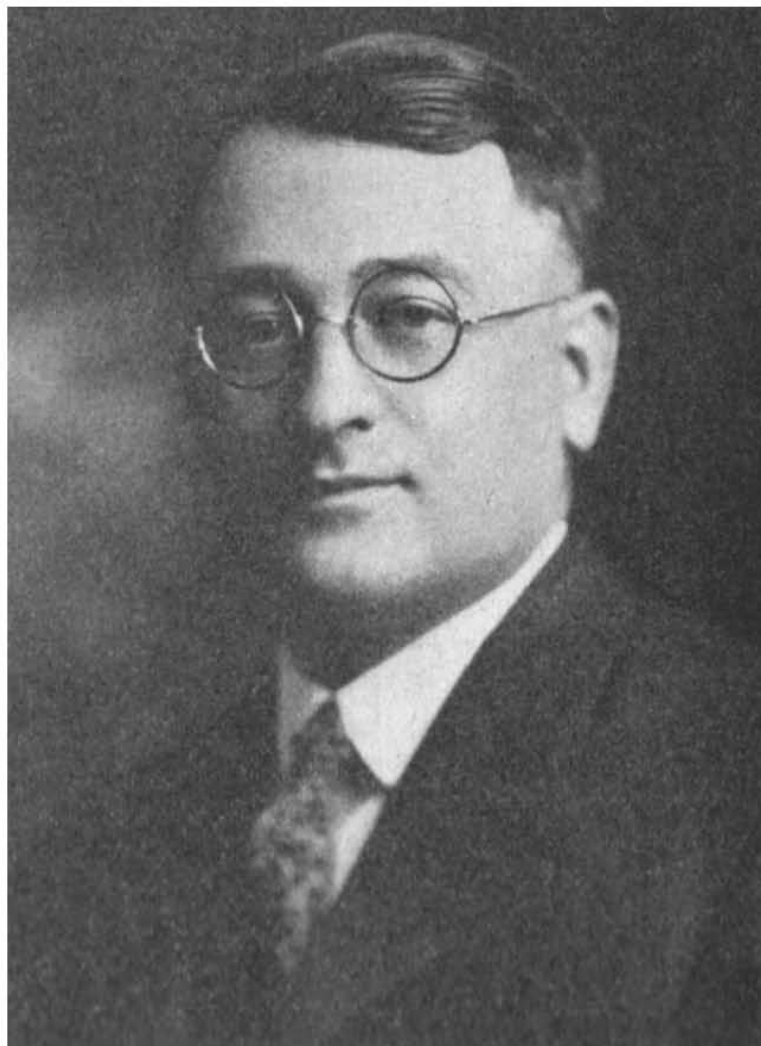
Although closed for three years during the Great Depression, the Claycraft plant at Shawnee was rehabilitated and reopened in late December, 1935, providing employment to 100 men, with C. Forrest Tefft as the general manager (*Brick and*



Map V  
Plant No. 2 Ohio Mining & Mfg. Co.  
(1910 Sanborn Map)

*Clay Record* April, December, 1935). In July, 1935, the plant resumed operations after a two month shutdown, with 75 men returning to work. By September, 1935, with plants at both Taylor Station, Franklin County, and Shawnee, Claycraft was offering its line of Perma-Chrome glazed products, sanitized brick facing tile, red and mingled shades of face brick, buff and gray face brick, as well as common brick. (*Ibid.*, September, 1935). The colored, glazed Perma-Chrome line proved popular in, for example, gas station construction, indicating that Claycraft was able to change with the times. Tefft, who was born in New York and graduated from the New York State School of Clayworking and Ceramics at Alfred, worked for various firms in Pennsylvania Ludovico-Celadon, before joining Claycraft in 1926. By 1929 he was general manager and in 1943 he acquired control of the company, serving as president until his death, April 11, 1952, whereupon the company passed

to the control of his children (*Brick and Clay Record* (20(4): 29). In 1970, the Claycraft company was operating plants in Sugar Creek, Sandusky, and Shawnee, producing 90 million bricks a year and employing a total of



C. Forrest Tefft  
(*Brick and Clay Record*, April 17, 1923)

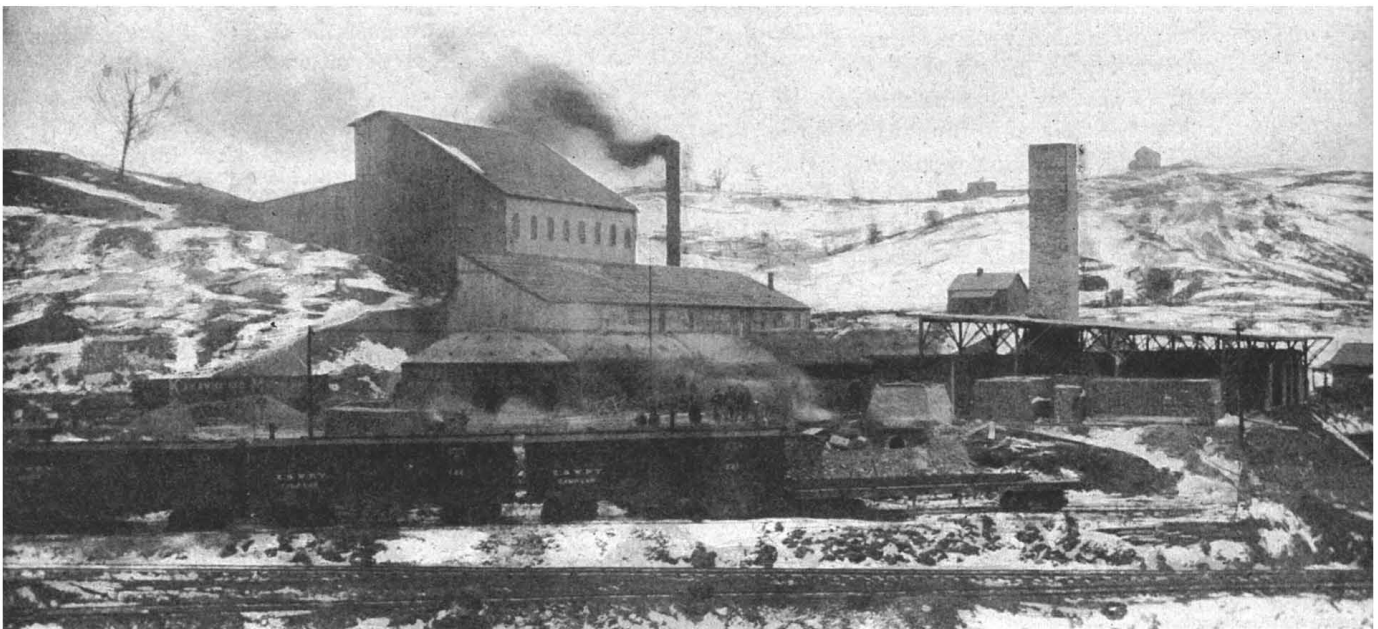
275 people, 125 of them in Columbus (Columbus *Dispatch*, March 8, 1979). According to Phillip W. Tefft, who was president of the firm during its last years, production at Shawnee Plant No. 1 ended first, with production at the modernized Plant No. 2 ending in the early 1970s, when it was taken over by a fiberglass manufacturing company (P. W. Tefft, pers. comm., May 30, 1997). Sanborn fire insurance maps are available for both of the Shawnee plants.

### Shawnee Flash Brick Co.

The Shawnee Flash Brick Co. was incorporated in 1905, with a capital of \$125,000. It was organized by F. H. Mutchler of Columbus, who left shortly afterwards to develop another plant at Moxahala. In 1907, J. B. Adams, of Marysville, Ohio, was president; Ferdinand Bauman, Columbus, vice-president; W. O. Copeland, of Columbus, secretary treasurer; and

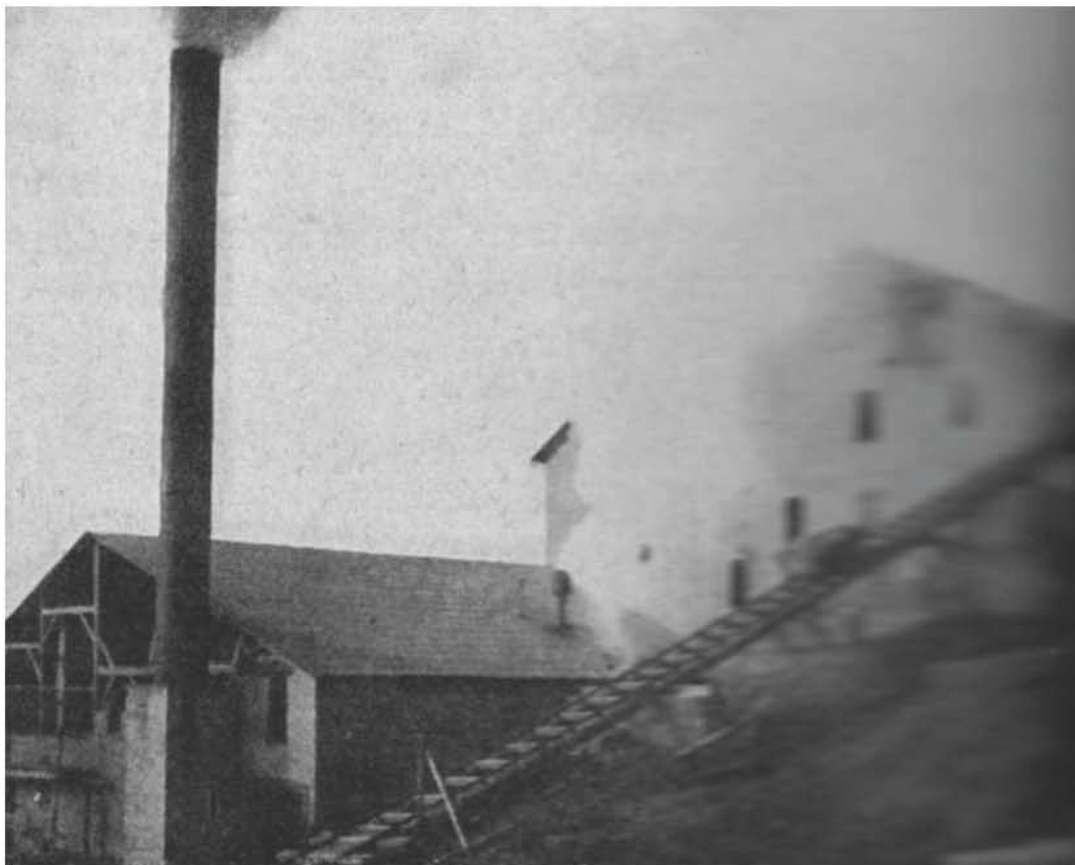
E. M. Starner, of Shawnee, superintendent. Starner was responsible for the plant design and its construction. The plant manufactured "a fine Iron Mottled Flash Brick" from the Lower and Middle Kittanning clays, as well as the Brookville, which was reached by a shaft. Employment of more than 100 men was expected. The plant site occupied five acres in the eastern end of Shawnee, south of the Claycraft brickyard and formerly the site of Fanny Furnace. The company also owned 213 acres of clay land. Because of the limited amount of level ground at the site, the machinery room was built against the face of the hillside, with the clay room some 30 feet higher. In making the cut for this face, the shale bedrock exposed was so incompetent that an expensive retaining wall was required. In addition, since the clay was mined by drifting near the foot of the hill, an inclined tram had to be built to haul the clay up to the clay room.

A nine-foot Raymond dry pan, a Raymond “Special” mixer, and two Berg presses were used to process the clay. Four round down-draft kilns were originally built, with a capacity of about 60,000 brick each, and three more were built soon after (*Brick and Clay Record* 26(4) 208-209, April, 1907).



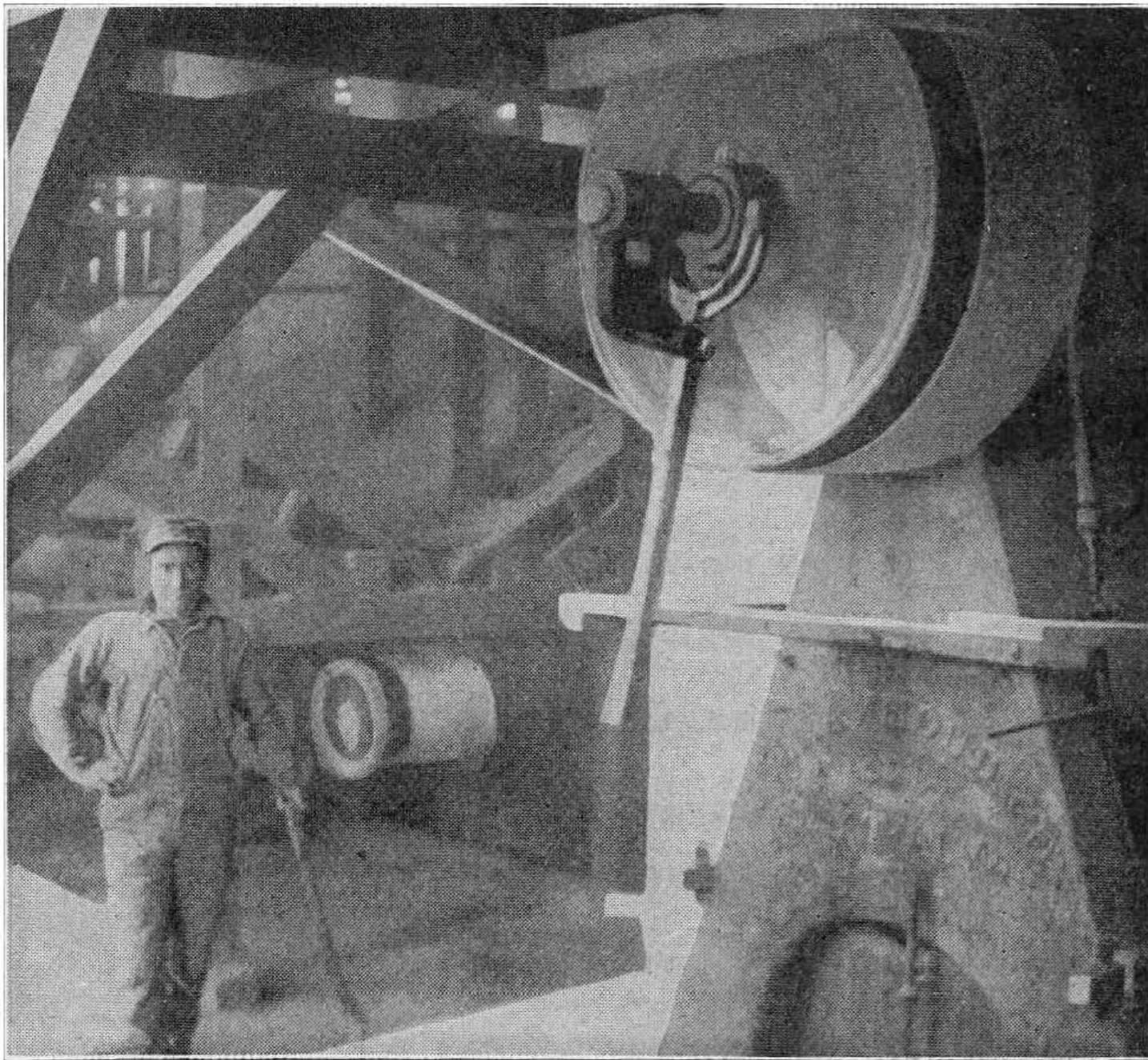
Shawnee Flashbrick Company 1907  
(*Brick* 36(4): 208)

Apparently the company was reorganized in 1910, as *Brick and Clay Record* (March 15 1910) reported that the Shawnee Flash Brick Co. of Columbus, was organized with \$200,000 stock to take over a brick plant at Shawnee. W. O. Copeland, L. W. Tussing, Fred Bauman, Sam A. Hudson and J. E. Koontz were incorporators of the new company.



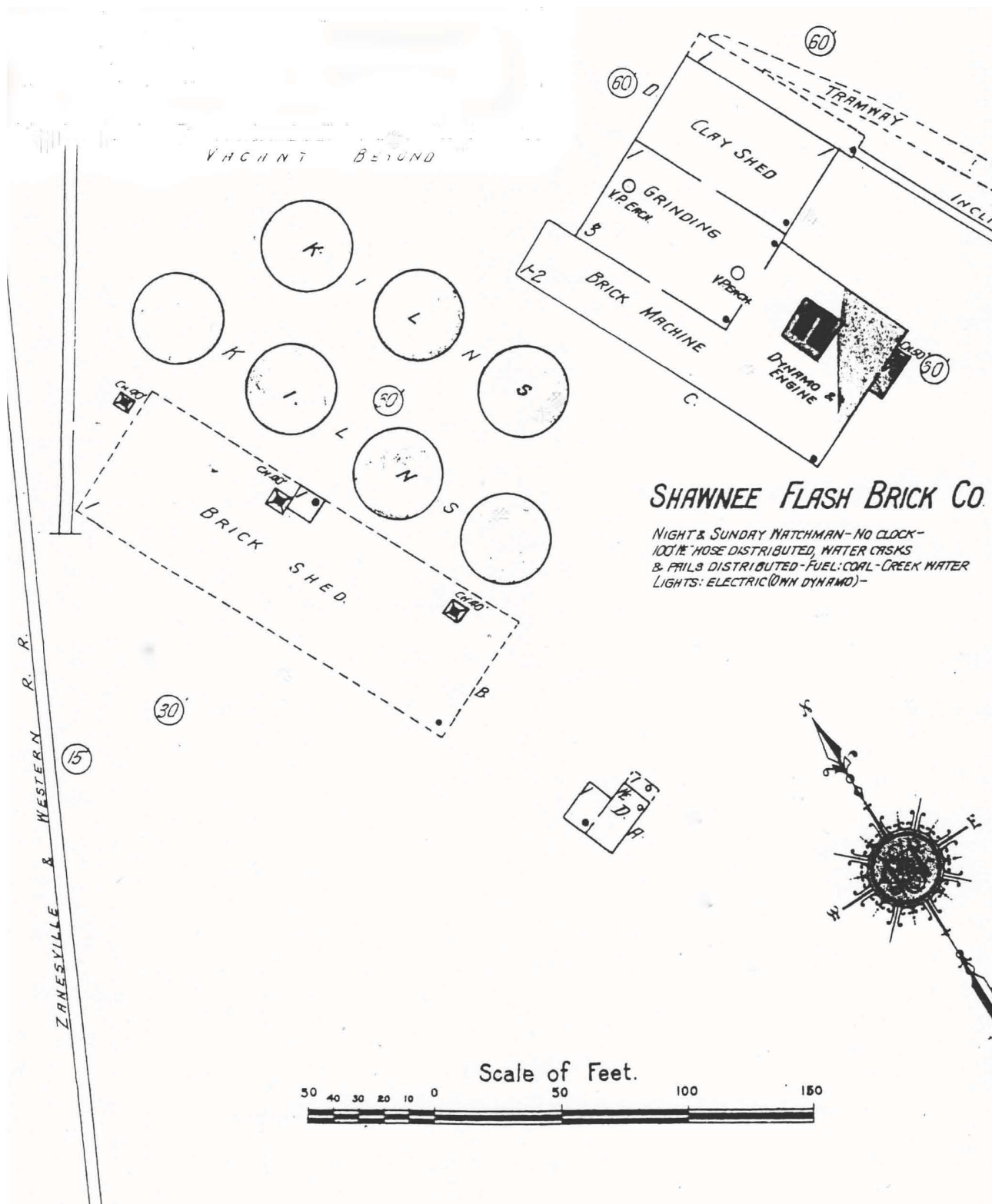
Shawnee Flashbrick Power House and Incline  
(*Brick* v. 26 no 4:208)





Shawnee Flashbrick Dry Pan Room (1907)

By 1919, the plant was owned by Central Refractories, which also had plants at both New Lexington and Moxahala, manufacturing face brick and firebrick (*Brick and Clay Record*, May 5, 1919), but the plant was still known as Shawnee Flash Brick on 1926 Sanborn maps. Ceramic industry directories still listed the Central Refractories plants at New Lexington and Shawnee as manufacturing face brick in 1928 (Bownocker and Stout) and the plant was subsequently known as the Midwest Brick and Clay Products Co. The plant apparently closed during the Great Depression, for in 1936 it was sold for scrap at a receiver's sale (*Zanesville Times Signal*, August 21, 1936). The 1910 Sanborn fire insurance map indicates that the plant was a relatively small one, with no more than seven beehive kilns (Map VI), although the 1926 map shows it had expanded to ten kilns.



Map VI  
1910 Sanborn Map of Shawnee Flash Brick Co.

## Iron Industry in Perry County

The upper Mississippian and lower Pennsylvanian rock strata of Perry County contain everything necessary for manufacturing iron-- iron ore, limestone flux, and coal fuel. Since before the turn of the century, however, iron production has not been economical, due in large part to the expense necessary in collecting sufficient amounts of the ore and to the occurrence of much larger ore deposits in the upper Great Lakes area. For a brief period, however, this combination of geologic resources, together with the clay and coal resources of area, brought significant industry and prosperity to Perry County region.

The exploitation of local iron ore deposits utilizing coal as fuel began in 1875 with construction of Baird Furnace, which went into blast on October 9 of that year. This enterprise

was ridiculed by most furnacemen but Samuel Baird (1825-1877), despite such skepticism and the depression known as Panic of 1873, built a successful iron works. The furnace stack was 44 feet high with an 11 foot 8 inch diameter at boshes, producing an average of 15 tons of iron per day. Despite being built three miles from the nearest railway, the furnace proved profitable and Baird was quickly emulated by other furnace builders.

In 1875, the Vilas and XX furnaces at Shawnee, as well as Gore (Thomas) Furnace went into blast, and investors planned to erect the Akron Furnace at Bessemer, the Ogden Furnace at Murray City, Monday Creek Furnace at Monday, and Craft's Furnace at Greendale, although several of these were not actually completed until 1878. Construction of Bessie Furnace at New Straitsville, Fannie Furnace at Shawnee, and Winona Furnace were also begun in 1877 (Tribe 1986: 52-53). Bessie Furnace, the last to operate, was not torn down until 1930.



Bessie Furnace  
(Little Cities of Black Diamonds Website)

As for Baird's Furnace, a tramway was built to connect with the railroad at Oreville, and the local deposits of Maxville limestone flux were replaced with Columbus limestone transported

by rail. Some coke was also used as fuel. Following Samuel Baird's death in November, 1877, the furnace continued to operate under the management of his son, Frank Baird. The furnace stack was rebuilt and enlarged in 1885 and ran until 1888. The stack was finally dismantled in 1894 (Stout mss.).



Baird Furnace (Martzolff 1907)



In the immediate area of Shawnee, iron production began with construction of the Vilas, XX, and Fannie No. 1 furnaces at Shawnee. Originally, the Vilas Furnace, built and operated by Joseph Vilas of New York under the firm name of New York and Straitsville Coal and Iron Co., was also called Mollie Furnace and was first placed in blast November 10, 1877. The stack was a small one, measuring no more than fifty feet high, fourteen feet in diameter at the boshes, and six feet in diameter at the hearth. Daily capacity was about 25 tons. The furnace employed up to 175 men in mining coal, ore and limestone, charging stock, and casting metal. Coal was obtained from their own mines, while ore was obtained from the Iron Point deposits north of Shawnee. Fresh-water Upper Freeport limestone was used for flux, from mines north and east of the furnace.



A second stack was completed in November, 1887, and was much larger, being 65 feet in height and fifteen feet in diameter at the boshes. This furnace had a daily capacity of 100-125 tons of foundry metal. By this time, however, native ores were nearly exhausted; utilizing Great Lakes ore, the two Vilas or New York furnaces continued operating until 1900 and were dismantled in 1905 (Stout mss.). The New York furnace complex stood in the hollow immediately north and east of Shawnee, but any trace has been removed by subsequent development by the Claycraft Brick Co. and later industries at the site.

The XX Furnace was built in 1875 but did not go into blast until January 18, 1877. This furnace stood on the west side of Route 93, south of the village of Shawnee and was operated by the Newark Coal and Iron Co., although the name of the firm was soon changed to the Standard Coal

and Iron Co. The furnace was 48 feet high with a 13 foot 5 inch diameter at the boshes and produced about 21 tons a day. The XX Furnace operated successfully until 1888, utilizing its own coal, Iron Point, Shawnee, and Baird ores, and local Upper Freeport limestone for flux. The furnace was rebuilt in 1879 and enlarged to a 25 ton per day capacity. In 1882 it became part of the combine known as the Standard Coal and Iron Co. The 1884 coal strike caused only a temporary shut down. In 1886 the furnace was controlled by the Ohio and Western Coal and Iron Co. The XX Furnace, however, proved to be the first coal furnace in the district to be dismantled, in 1895 (Stout mss.).

The two Fannie furnaces, also in Shawnee, were built about the same time as Mollie (Vilas) Furnace. The Fannie furnaces operated until 1888, when the company failed. Fannie No. 1 originally was built at Newark in 1874-75, but after a brief run the stack was closed down. Because of the unfavorable location at Newark

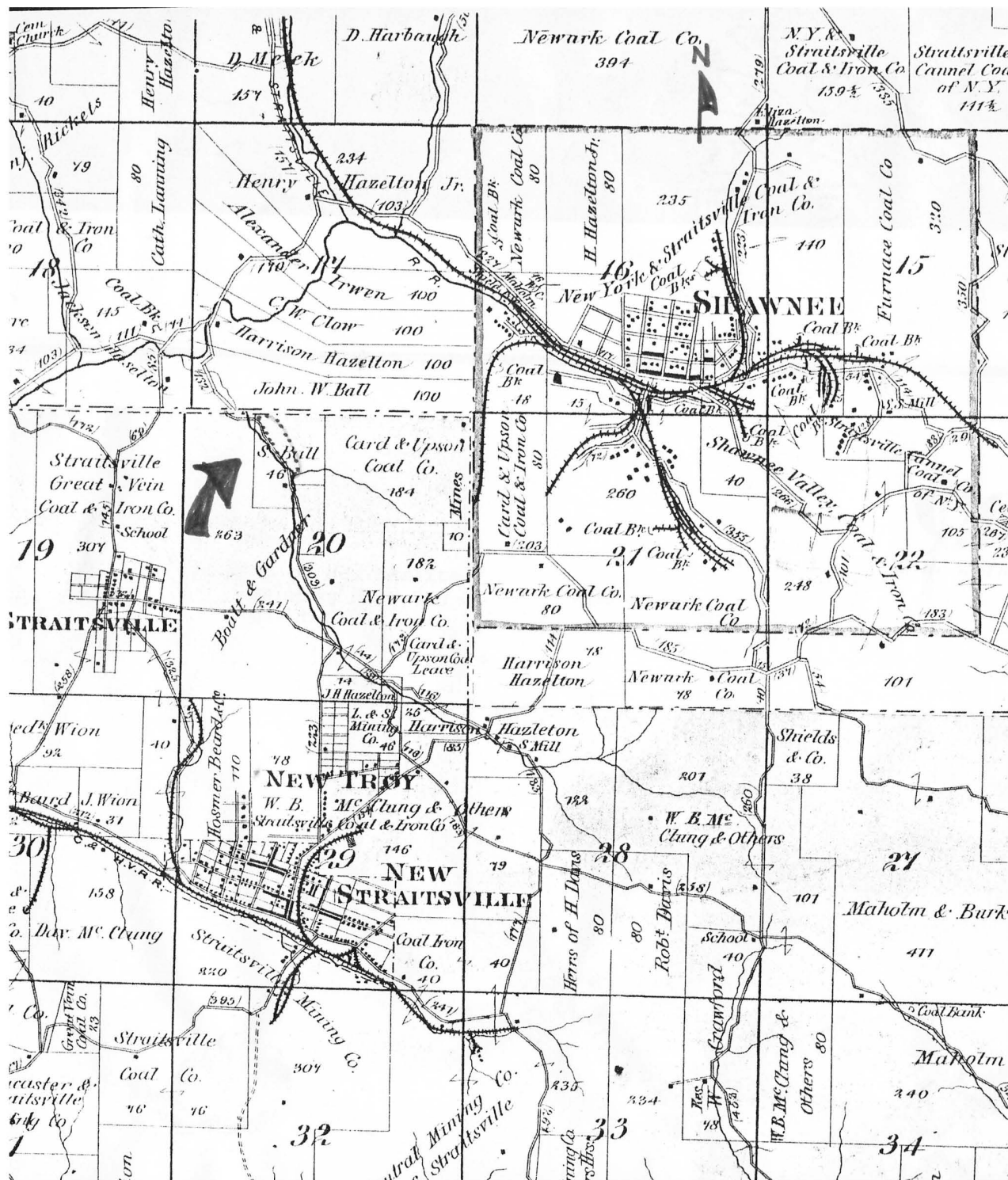
in terms of coal, ore, and limestone, the stack was moved to the company mines at Shawnee, with the rebuilt furnace finally blown in September 15, 1876. The stack was 47 feet high with a twelve foot diameter at the boshes, with a daily output, of 11 to 15 tons of foundry iron. The furnace employed about 90 men and made a profit of about \$7.00 per ton.

Fannie Furnace No. 2 was placed in blast October 10, 1877. It differed structurally from Fannie No. 1 but was similar in size and produced about 20 tons of iron per day. Both furnaces were operated successfully for a number of years but failed in 1888. They continued operation under a receivership and were owned by F. S. Wright of Newark when they finally suspended operations in 1892 (Stout mss.). The site was later occupied by the Shawnee Flash Brick Co., subsequently known as the Midwest Brick Co.

## **Industrial History of the Project Area**

### **Card & Upson Coal Company**

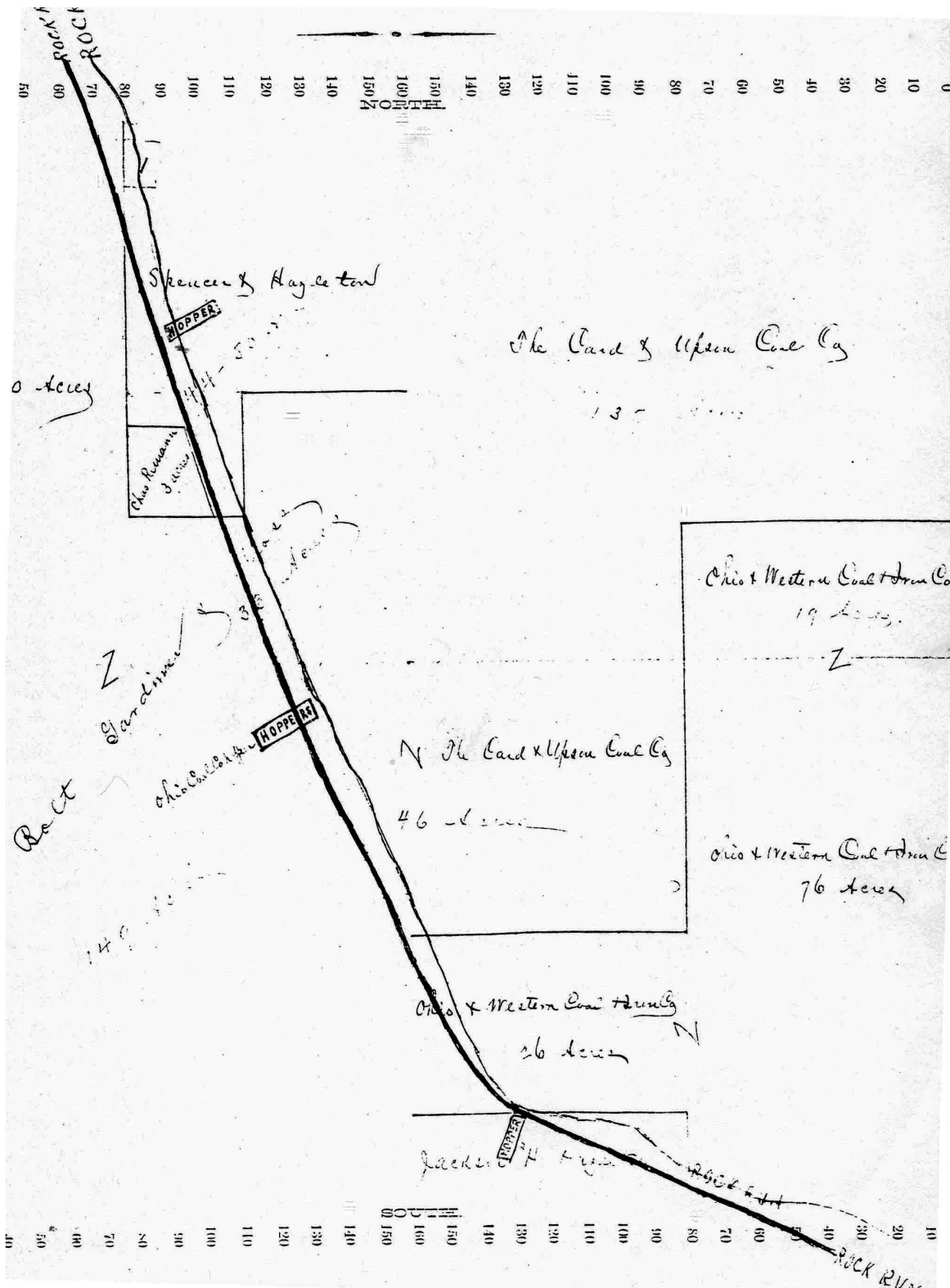
In 1875, the project area formed a portion of a 46 acre tract owned by Stephen Ball, who retained ownership of the undeveloped property as late as 1884. The area was already surrounded by mining activity, however, as indicated by the 1875 Perry County atlas (Map VII), which shows the Card and Upson Coal Co. owning some 184 acres immediately to the east of the Ball property; Boalt and Gard[i]ner owning 253 acres to the southwest and the Newark Coal & Iron Co. (soon to be building its XX Furnace at Shawnee) owning 182 acres to the southeast (Map VII). Land ownership in Section 20 remained much the same in 1884, judging from county tax duplicates, although Boalt and Gardiner had become Barney, Boalt, Gardiner, and Moss while the Newark Clay and Iron land was held by the Ohio and Western Coal and Iron Co.



Map VII  
 Portion of Coal and Salt Lick Townships  
 1875 Atlas of Perry County

By 1890, most of the Stephen Ball tract, including all of the study area, had passed to Spencer and Hazleton (variously spelled), who had erected a coal hopper along Rock Run Branch Railroad, as indicated by an available 1890 Coal Township tax map (Map VIII, p. 59).

The Ohio Inspector of Mines report for 1889 (1892: 58) reports that Moses Nixon was killed by a fall of slate in Hazleton's Mine, which the Annual Report for 1890 describes as "situated on Rock Run in Coal township, and... operated by J. B. Hazleton, employing eleven miners and one day hand. Although this would seem to be Jackson H. Hazleton property in the southeastern portion of Section 20 and not the Spencer and Hazleton mine, which is referred to (*Ibid.*, p. 3-84, 253) as the "Shawnee Mine," the same report provides detailed and interesting information on the Spencer & Hazleton mine:



Map VIII  
1890 Coal Township Tax Map

"This mine is situated on Rock Run, one mile north of Straitsville, in Coal township, and was opened by WP Rend & Company, but is operated by Spencer & Hazelton. It is a drift opening in the No. 5 seam, and the coal is very irregular, with good thickness, which will average about seven feet, with a very dangerous roof of a soapstone nature. The entries are driven double, and ventilated by a furnace, which was built during the year. Forty-five miners and eleven day hands are employed. The mine was idle during the greater part of the summer. I visited it December 6, April 16, July 19, and September 27. On the first visit it was in as good condition as possible, having natural ventilation. I ordered two break-throughs to be closed between the west entries. On the second and third visits the mine was idle, but I found air good



on fourth visit. I stopped the turn in one room where two young men were working, as the room was not properly timbered. I also cautioned some others as to their system of timbering, as I found great carelessness in this respect. There was complaint of posts being too short, to which I called the superintendent's attention, and was informed they would be furnished any length desired. Moses Nixon was fatally injured here November 1, by a fall of coal. J. P. Hazelton is superintendent, and Jerry Donelly mine boss." (Hazleton is spelled variously in different sources; variations in this report follow those of the original.)

The "Hazleton Mine" was actually that run by Jackson H. Hazleton, near the head of Rock Run, where eleven miners and one day hand were

were employed in 1890, although the mine “was not worked much this year,” according the annual report of the Ohio Inspector of Mines (1892: 185).

Although the Rock Run railroad spur appears to have been no more than a few years old at this time (1890), the attempts to build the spur were considerably older. For some reason, Henry Hazleton, Jr., [believed to be Jackson H. Hazleton, of “Hazleton Mine”], who owned land at the southern end of the proposed railroad extension, was opposed to the venture; in fact, the Newark, Somerset & Straitsville Railroad Co. had to obtain an injunction “enjoining him from in any way interfering with the construction of what, is known as the Rock Run Extension of said railroad.” (Perry Co. Probate Court 5663-93C, August 6, 1883). Four years later, E. C. Winstanley and the Card and Upson Coal Company (Perry Co. Deed Records 39: 270-71)

vouchsafed an agreement by which Card and Upson would furnish one half of the coal mined and shipped for the next thirty years, as well as the railroad right-of-way, to Winstanly, in return for his completing a railroad to Shawnee, to be in operation by May 1, 1888. The date of completion subsequently was extended to November 1, 1888. Further the available records saith naught, but it would appear that this short spur from the existing Shawnee and Muskingum River Railway was completed, if not by that time, certainly by 1890. Faint remnants of the railroad bed remain along Rock Run today (p. 64).

Although it lies outside the present project area, there is additional information on the Card and Upson Coal Co. that may be of some interest. Perusal of the annual reports of the Ohio Inspector of Mines reveals that from at least 1880 through 1890 the Upson mine was operated by



## Abandoned Bed of the Rock Run Railroad Spur

Card and Upson, although the firm was sometimes simply referred to as the Upson Coal Co., as in 1884 (10th Report: 85), when Walter H. Upson was superintendent, and Rees(e) Williams was the

bank boss. According to a May 10<sup>th</sup> 1884 inspection the mine was in good condition and was worked on the double entry plan. Accidents did occur, and the death of Henry M. Williams, killed in Upson's mine, Shawnee, by a hanging shot, September 2, 1880, is recorded in the Inspector of Mines' report for that year.

In 1882, the Inspector of Mines' report indicated that the Upson mine employed about 100 miners and 13 day men. The furnace was found to be too small to ventilate the whole mine, and a new furnace was under construction. In the following year, the furnace was described as one of best constructed in the valley, six feet wide, and 3.5 feet above bars, the arch being 24 feet in length, air shaft 95 feet deep, and a stack on top of the furnace 32 feet high.

During the great Hocking Valley coal strike, Upson's mine was fired in three places. In two instances the fire was promptly extinguished, but

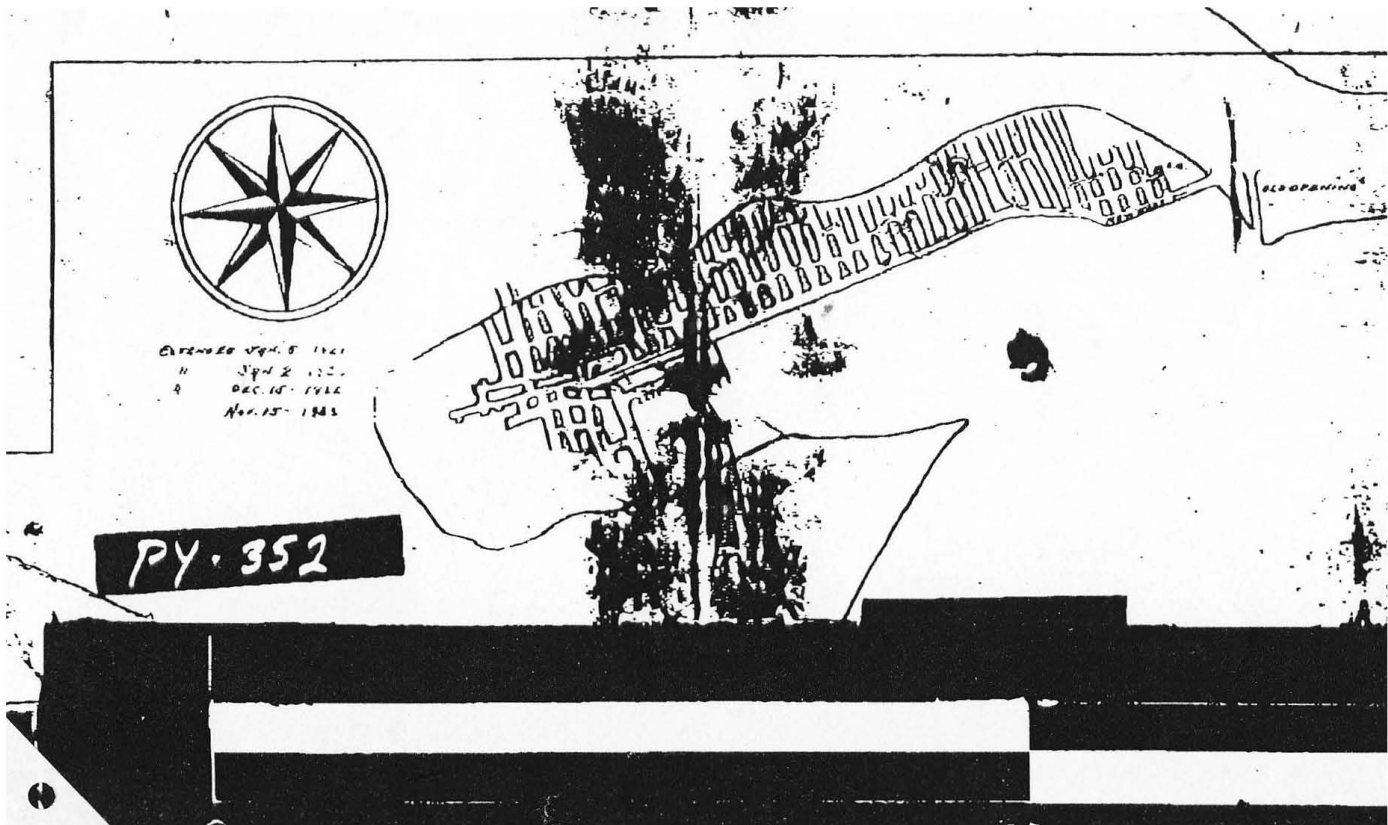
the third place, surrounded by a body of rotten coal, proved very obstinate. Several unsuccessful efforts were made until a roadway was opened around the fire. By this means the smoke was conveyed to the furnace [used to create a draught for ventilation without interfering with places where the mining continued]; by cutting off the connections with the “live” coal, the roadway eventually caused the fire to burn out of its own accord (11th Annual Report, Ohio Inspector of Mines: 86).

The 1886 report of the Inspector of Mines also notes that the No. 3 or Rock Run mine, located halfway between Shawnee and Straitsville and owned by the C. & H. C. & I. Co., was in good condition. This mine was previously operated by William Job (Ohio Central Coal Co.). Three other new mines had also been opened along Rock Run Branch: one owned by J[ackson H. Hazleton]; one owned by the Ohio Coal Co., with Thomas Black as super-



intendent; and the Shawnee Mine, owned by W. P. Rend, with Thomas Wearburn as superintendent and mine boss. The Shawnee Mine, later to be the Spencer and Hazleton mine, was operated on the double opening plan. (These properties are clearly indicated on the 1890 tax map (Map VIII, p. 59).

The 1890 annual report of the Ohio Inspector of Mines describes the Upson Nos. 1 and 2 mines as located one mile south of Shawnee, operated by the Upson Coal Co., and employing ninety-seven miners and seven day hands. The No. 2 entry was a new opening with, unfortunately, a bad roof. Reese E. Williams was supervisor of both mines. The Card and Upson Mine was purchased by the Ironclay Coal Co. in 1906 and was used by the Ironclay Co. as late as 1923 (Map IX).



## Map IX

Ohio Geological Survey Mine Map PY-352  
Ironclay Brick Co. mine southeast of project.  
“Old Opening” at east end probably represents  
the old Upson Adit.

### Standard Brick and Terra Cotta Co.

The Standard Brick and Terra Cotta Co. was incorporated September 11, 1889, with James P. Hazelton as president. The other members were



David C. Thomas, Henry Spencer, George W. Ogan, and Julia Spencer (Ohio. Attorney General. Corporation Records). The principal business of the new organization was to be the mining of clay and the manufacture of brick and or clay products. Capital stock was \$8000, issued in 80 shares of \$100 each. The 1890 tax map of Section 21, Lick Township (Map VIII) shows a tipple or “hopper” on land owned by Spencer and Hazleton. This structure probably burned in 1894/95, as noted below.

A detailed biographical sketch of James P. Hazelton (Taylor 1909: 286-290) provides additional information. In January, 1885, Hazelton formed the partnership with Henry Spencer to develop the Spencer and Hazleton coal mine. They also conducted a general mercantile store together for over twenty-two years. In 1890 Hazelton began the manufacture of paving brick, switching to building brick in 1895 and in the

winter of 1898 organized the Columbus Face Brick Co., serving as vice-president and manager until 1900, when he resigned in order to focus on his coal interests.



James P. Hazelton  
(From Taylor 1909)

The 1895 Columbus city directory lists the Standard Clay Co., manufacturer of pressed brick and roofing tile, with James P. Hazelton as president and general manager; Charles W. Meggenhofen, vice-president; Benjamin E. Styles, secretary; and William M. Graham, treasurer. Hazelton's residence is given as New Straitsville. Henry Hazelton's will, probated on November 25, 1899, provides some interesting information on the Spencer and Hazelton firm, in that it indicates he was "liable as surety for... promissory notes given by me to divers parties and in notes given by me for their debts as partners." Hazelton's will provided that all such notes be paid out of his estate as advancements and that James P. Hazelton and Julia Hazelton Spencer (brother and sister, children of Henry and Emma M. Hazelton) be charged accordingly: these sums amounted to \$16,140 for Julia and \$16,293 for James.

Further, Hazelton's will gave all of his household goods, as well as all lands and tenements, and three cows, to his widow; all royalties derived from his leased coal lands, however, were to be divided equally among his seven children. By 1910, these lands appear to have been worked mainly by the Columbus and Hocking Coal and Iron Co., and the Hazelton estate papers indicate that from October 4, 1905, to February 15, 1910, his estate received \$17,892.74 in coal royalties.

At the time of his death, June 21, 1910, James Hazelton, who died intestate, was only fifty years old. He was listed simply as "coal operator," with offices in the Columbus Savings and Trust Building. Hazelton had moved to Columbus around 1907 and is listed in the 1906/07 Columbus directory as "loans" and in the 1909/10 directory as "coal lands and leases." The widow and eight children survived.

Orton (1892: 207) includes the Standard Brick & Terracotta Co. in a table of 44 Ohio paving brick factories, indicating that it produced “Parto Block,” had eight kilns with a kiln capacity of 255,000 and an annual production of six million brick. It was the only paving brick plant listed in Perry Co., although adjacent Hocking County included the Logan Granite Clay Co., the Logan Fire Clay Co., the Hocking Clay Co., the East Clayton Manufacturing Co., and the Haydenville Mining & Manufacturing Co.

Fragments of both Parto Block and Rock Run Paver paving brick occur at the site but are not common and production of paving block must have soon changed to that of face brick, for only one reference to these brand names other than Orton's has been found: in 1893 A. J. Puch [Pugh] & Co. of Columbus was awarded a contract to pave part of Converse Street, from Main to Angle, in Dunkirk, Indiana, with Parto Block (*Paving and Municipal Engineering* 4(2):

118) and Newport, Kentucky, awarded the “Standard Construction Co.” \$47,565 to pave York Street between Third and Eight with “Porto” block (*Ibid.*: 5(2) 104). The origin of the name “Parto Block” remains unknown; presumably it is a patented brick, but searching patent records for 1890-92 has failed to find any reference to it. Dzuro (2008) includes it and correctly attributes it to the Standard Brick and Terra Cotta Co., but provides no additional information.







Two or three shapes of pavers impressed “Rock Run Paver” have been found at the Rock Run site. One measures  $2\frac{3}{4} \times 4 \times 9$  inches and is illustrated by Dzuro (2008: R-11) as a “depot paver,” which he attributes to “the area of Shawnee and New Straitsville,” to either the Iron

Clay or the Rock Run brick plant (essentially one and the same). Another example found at the site, measure 2 ½ x 4 x 9 inches, and a third is 4 x 1 ½” in cross section but is incomplete, so that precise length cannot be determined.

It may be significant that Orton does not list the Standard Brick Co. as a manufacturer of face brick. As Stout (1923: 51) notes, this was the initial period of paving brick manufacture in Ohio, and production far exceeded demand. A number of firms either closed or changed their product line, and the Standard Brick Co. appears to have been one of these. A small hillock of waster material found along the eastern side of the later Ironclay brick storage sheds contains a few fragments of both the Parto Block and Rock Run Pavers but also contains fragments of similarly over-fired plain, unmarked building brick. In addition, a note in the August 28, 1894, issue of *Clay Record* indicates that the "Standard Pressed Brick Co. works at *Stuartsville*, Ohio,



will start up Monday with increased force." Straitsville is undoubtedly meant, as numerous such typographical errors are common in this trade publication; so it seems clear that face brick production started at this site while the Standard Brick Co. was still in operation by J. P. Hazelton.

At some point during the winter of 1894/95 the Standard Brick and Terra Cotta Co. suffered a serious fire. This may have been the end of production of the Parto Block and Rock Run pavers but there is no firm evidence either way. The only reference to this disaster is a brief note in *Clay Record* of March 21, 1895, which notes that the "brick works located on Rock Run, near Gove [i.e., Gore], Ohio, have been entirely rebuilt, and they are now more extensive than the old ones which were destroyed by fire several months ago."

Compelling evidence that the company produced building brick exists in the form of examples with an attractive, elaborately-shaped

frog identifying them.; but, unfortunately, no examples were found at the Rock Run site and it is not certain precisely when these bricks were manufactured.



On December 17, 1898, the Standard Clay Co. sold 83 acres in Section 20 to the Columbus Face Brick Co., for a sum of \$100,000 (Perry Co. Recorder's Office 522283). James P. Hazelton was listed as president and B. E. Styles, secretary. The following year, the Columbus Face Brick Co. purchased an additional twelve acres from Barney, Boart and Gardiner Coal and

Iron Co., for \$600 (Perry Co. Recorder's office 53:317), excepting the right-of-way for the Newark, Somerset and Straitsville Railroad.

In 1902, the Columbus Face Brick Co. was in turn sold to David C. Meehan, who was president of the company, for \$150,000 (Perry Co. Records Office, Deed Records 50: 520). Meehan immediately sold the property to the Ironclay Brick Co. of Columbus, Ohio, for \$200,000 and assumption of and payment of a \$100,000 mortgage on property (Perry Co. Deed Records 50: 522). (According to Ronald Lehman, Meehan, a devout Roman Catholic, offered to sell the company to Lehman's grandfather, David Lehman, if he would convert to Catholicism, but instead it was sold to W. D. Brickell. Upon Meehan's death, his shares of the company passed to the Pontifical College Josephinum.) In 1905, the Ironclay Co. acquired 47 additional acres from Upson Coal and Mining Co. (Perry Co. Deed Records 71: 403).

## Ironclay Brick Co.

The Ironclay Co. continued to expand, as indicated by Perry Co. tax duplicates, which show that it paid taxes on 54 acres in Section 20 in 1905 and on 131 acres in 1910. In February, 1911 (*Brick and Clay Record*, Feb. 1, 1911) the company held its annual meeting in Columbus and made no change in officers, W. D. Brickell remaining president. The plant at Shawnee was reported to be “one of the largest face brick plants in the state.” The following year, the plant saw construction of an additional large kiln, for a total of 22 (*Ibid.*, September 15, 1912). Eventually, Brickell sold control of the company to David Lehman, Sr., although Mrs. Brickell remained on the board of trustees.

Throughout its history the company was beset with labor disagreements, though it certainly was not alone in this respect. In March, 1908, the local union of the International Brick, Tile and

Terra Cotta Workers' Alliance signed a scale submitted by the Ironclay Brick Co., changing nearly all labor to piece work, with clay miners taking a reduction of 5 cents per ton. All of the brick plants in the vicinity had been shut down for more than three months. Ironclay resumed operations at once, and took back all of its old employees, establishing a precedent for several other plants in the area (*Brick and Clay Record*, March 15, 1908).

In 1914, the four brick companies in the Shawnee area were hit by a strike that lasted from January 1 until April 1, at which time 500 men went back to work. The companies gained a distinct victory, allowing them to hire and discharge without any reference to the labor unions involved, giving them the power to operate virtually open shops. (*Brick and Clay Record*, March 7, April 7, May 19, 1914). The Ohio Mining and Manufacturing Co. plants did not actually resume work until May, after a five month shut down (*Ibid.*, May 30, 1908).

In February, 1932 (*Brick and Clay Record* 80 (2)), Ironclay elected J. M. Adams president and treasurer; C. J. Neare, vice president; and David Lehman, secretary and general manager. Adams had begun as a bookkeeper for Ironclay in 1900 and rose to be president of the company, a position he filled for thirteen years. Adams was also one of the organizers of the American Face Brick Association and its first president. He died in 1938 (*Brick* 92(9): 34).



John McKinney Adams (1860-1938)



J. M. Adams Newly Elected President  
American Face Brick Association  
(*Brick and Clay Record* 1922)

A combination of labor trouble as well as the Depression appears to have spelled the end to the Rock Run plant. According to *Brick and Clay Record* (September, 1936), the plant had been shut, down for six years when it was dismantled in September, 1935, and the dry pans and steam shovel moved to Ironclay's Hanover plant. Mineral industry directories indicate that the Ironclay Brick Co. employed 71 males and one female in 1929 but in 1934, only two males, clearly indicating that the plant was inactive by that time.

The Ironclay Co. continued to produce brick at its Hanover plant, but this was sold to another firm in 1949, and emphasis was placed on selling building supplies rather than producing them. The Hanover plant continues production today as part of the Bowerston Clay Products Co., but the Ironclay Co. finally closed in 1973.



# Iron-Clay Brick Plant at Shawnee, O.

1—2½ Ton Plymouth Locomotive 38 gauge, 1—7 Ton Plymouth Locomotive 42 gauge, 1—60 H.P. Fairbanks-Morse Diesel engine with D.C. generator, 46.8 K.W. complete with switchboard, 1—120 H.P. Fairbanks-Morse Diesel engine, 1—12,000 gal. oil tank, 3,600 gallons fuel oil, 1—2 K.W. Westinghouse light plant.

Above machinery in good condition and can be bought at less than half of original cost. Also belts, pulleys, line shafts, brick presses, dry pans, roll crusher and other miscellaneous equipment.

IRON-CLAY BRICK CO.,  
SHAWNEE, O.

Elmer O. Heath in charge of sales.

From *Zanesville Times Signal* August 14, 1936

## Subsequent History of the Rock Run Site

The ca. 6.38 acre Ironclay factory site was sold by D. Meredith, president, January 15, 1939, to David J. Lewis, Thomas L. Lewis, and Blanche

Snyder. An additional 153.62 acres was later sold to the U.S. government (excepting mineral rights) (Perry Co. Deeds: 128: 512). Substantial amounts of coal stripping in the Middle Kittanning (No. 5) coal occurred to the east of the Ironclay site about this time, although some coal stripping (possibly associated with the brick plant) is shown on an earlier 1938 aerial photograph.

A Division of Mines and Reclamation memorandum indicates that coal refuse in the project area and adjacent gob piles on U.S. Forest Service property to the east are the result of a coal washing operation owned by the Sidwell Brothers in the 1940s (letter, Dr. Jeffrey C. Reichwein, April 8, 1997). Available coal and non-metallic directories indicate that the Sidwell Brothers were based in Deavertown during the 1940s



Aerial Photo of Ironclay Plant ca. 1938





Aerial Photo 2006 (Ohio Division of Geological Survey) showing Project Area and Abandoned Mine Locations

and in South Zanesville during the early 1950s but provide no specific information about where they were mining coal in any given year.

Following David J. Lewis' death in 1982, mineral rights for this property have been held by a family owned corporation known as Lewis Resources, Inc. (Thomas A. Lewis, January 15, 1993, letter to Dale Newell). According to Lewis (pers. comm., May, 1997), the standing chimneys at the Ironclay site (known locally as "Seven Chimneys," although existing photographic documentation indicates that there were eight large stacks at the plant) were demolished by the Altier Brothers of Corning, Ohio, in 1984, the brick being used in local road construction. The actual kilns, according to Ron Lehman, had been removed previously.

## PHASE I FIELD RECONNAISSANCE

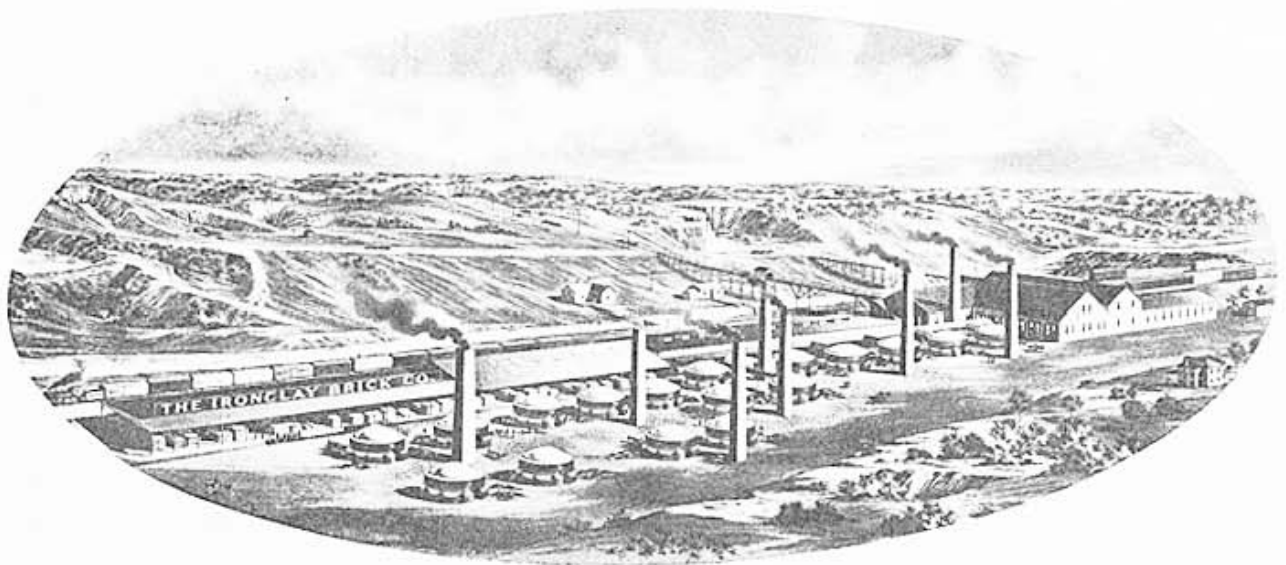
### Study Design, Field Conditions, Survey Strategy

Initial field study of the Ironclay factory site during the pre-bid conference conducted by the Ohio Division of Reclamation made it clear that

study of the site would not be so much locational in nature as documentary and interpretive. Most of the feature remnants contained within the site are of such large scale that there was no difficulty in locating whatever remnants exist within the project area; the primary focus of the report is, therefore, identifying and interpreting these features.

In terms of the Ironclay brick plant proper, this task was made considerably easier by the existence of three separate illustrations of the Ironclay plant. (Unfortunately, no existing fire insurance maps of this site have been located, since the plant was not actually located in a village or municipality.) One is a drawing of the Ironclay plant taken from a 1907 souvenir booklet (Anonymous 1907). Although the foreground and background are idealized (no highway is shown in front of the plant, and the house at the extreme right did not exist, at least not in that location), the plant layout and the

appearance of the buildings and other structures seem to be quite accurate. Note that there are eight rather than seven large chimneys indicated; two trestles are shown; and there appears to be an indication of an incline along the hillside behind and across the creek from the brick sheds at the left (north) side of the illustration.



THE IRONCLAY BRICK COMPANY'S PLANT.

Perhaps most importantly, Mr. Lloyd Nixon of Gore, Ohio, provided a three-foot long composite photograph of the Rock Run plant and

permitted this to be copied. Unfortunately, because of the manner in which the individual sections are taped together and because of curling, there are slight offsets between the individual sections as copied, but these gaps are relatively minor. Because of the excellent documentation of the site provided by this photograph, discussion of the Phase I field reconnaissance will center largely around this photographic record.

The major concerns to be addressed in the Phase I field assessment centered around documentation of the Ironclay plant layout as well as the discovery and documentation of any physical evidence relevant to interpretations of the plant layout. An additional concern was the question of whether any discrete features remained that could be attributed to the earlier clay products companies located at this site, as well as the description of any waste material that could be assigned to one period of activity or

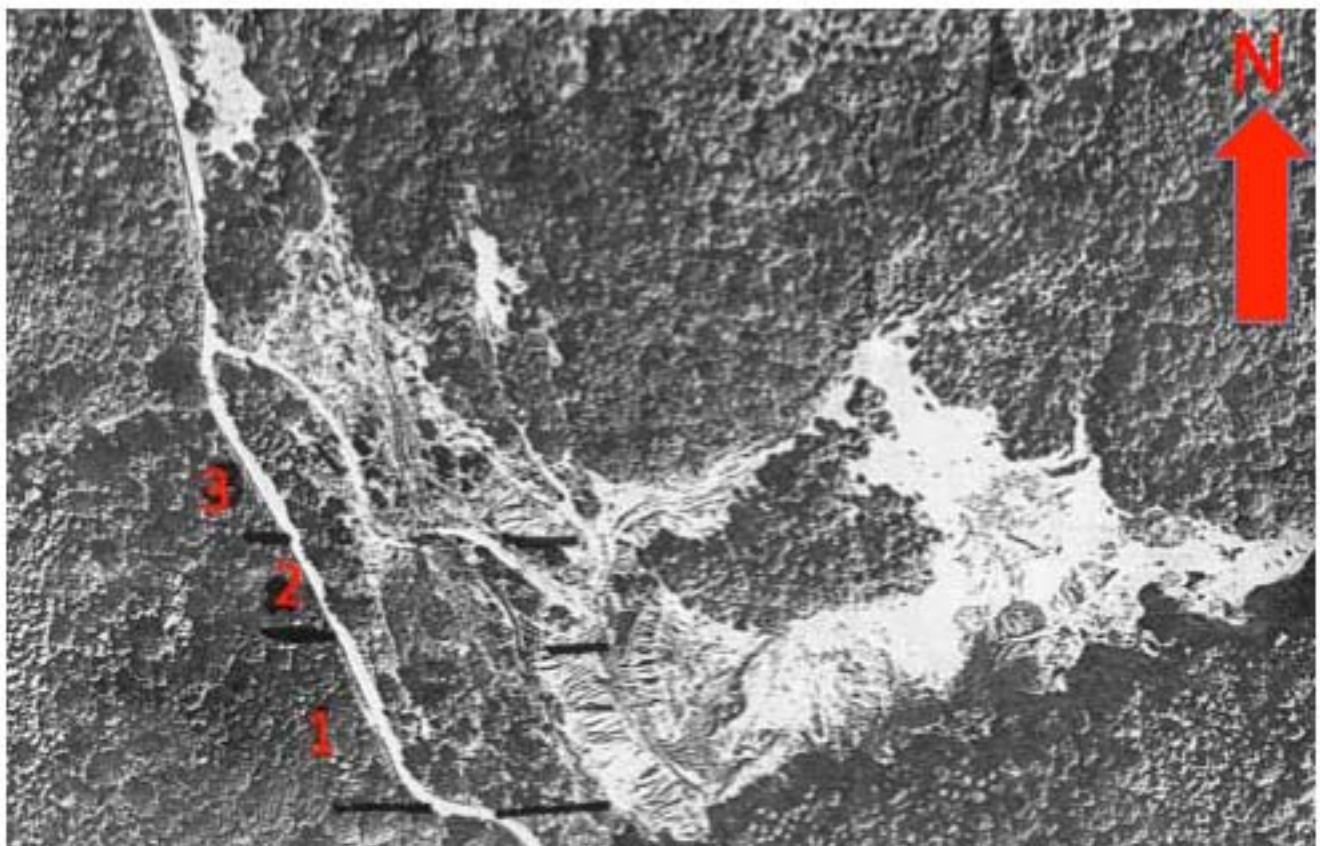


another. A particular objective of the Phase I field reconnaissance was to determine whether any discrete features related to the earlier Standard Brick and Terra Cotta Co. could be located. Unfortunately, no documentary evidence exists regarding the layout of this plant, which is known to have burned in 1894/95. A final objective was to identify any features that might be associated with the Sidwell Brothers' coal mining/washing activities subsequent to the closing of the Ironclay plant and to determine the degree to which these subsequent operations impacted the archaeological integrity of evidence of the earlier industrial activities at site.

## **Archaeological Findings**

The physical remains of the Ironclay brick works and the other historic features examined during the Phase I reconnaissance survey will be discussed in terms of three areas: 1) a southern area including the brick foundations of the main

Ironclay building; 2) a central area now marked by coal refuse and, east of Rock Run, the foundations of the small, L-shaped building shown on the right side of the Lloyd Nixon photograph and the concrete and brick oil/gas drum cradle; and 3) a northern area, including remnants of the brick shed foundations, a weigh station, and the concrete foundations for a coal tipple.



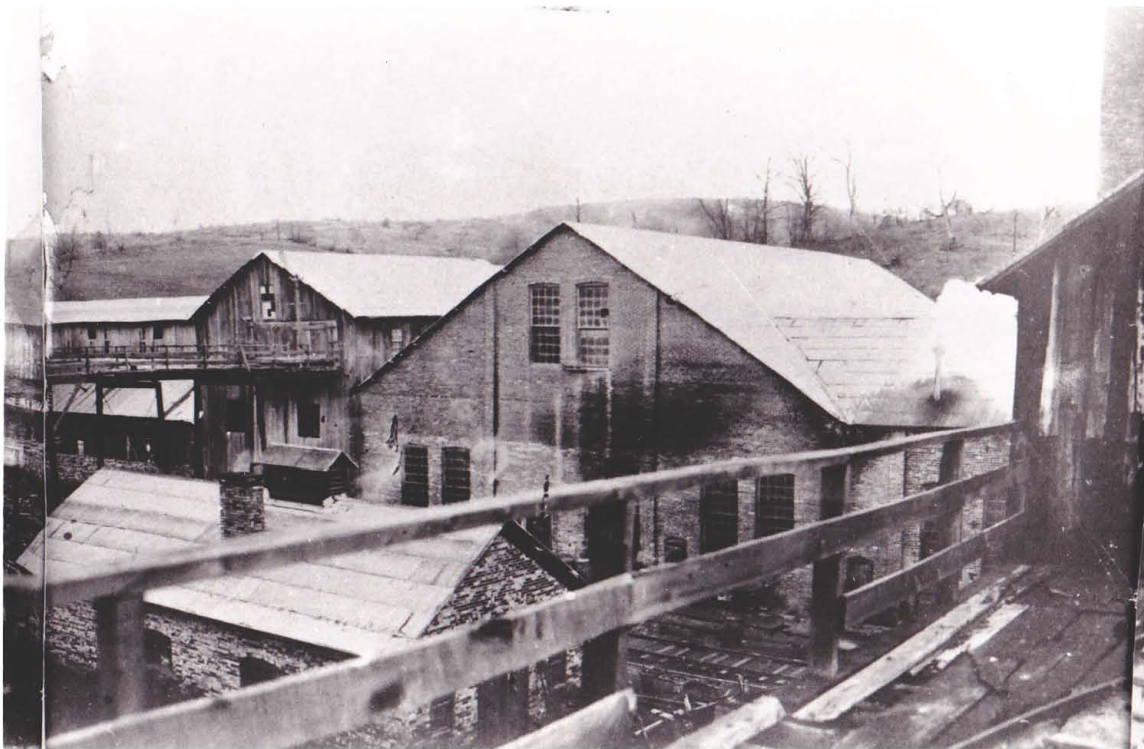
Aerial Photo Showing Subareas 1-3

In terms of the more recent aerial photograph (p. 93), these may be identified as 1) the wooded area north and east of the sharp curve in the township road, 2) the clear, barren area to the north of 1 and south of the secondary road transecting the project area and crossing Rock Run, and 3) the area north of and on either side of the secondary road crossing Rock Run.

### Ironclay Plant Layout

Based primarily upon the photographic evidence available as well as the fact that brick plant layouts are relatively simple in design, the Ironclay plant layout can be reconstructed with considerable accuracy. With reference primarily to the Lloyd Nixon photograph and proceeding from south to north, there was a complex of three attached buildings: an elongate, frame, one-story structure with a central, monitor-type gable portion raised to two stories, with very small cleristery windows; on the north, and at right

angles to this building were two attached structures, one of frame and one of brick, both two stories in height but with walls of the frame structure being somewhat higher. These three buildings stood immediately adjacent to the Rock Run railroad spur. It is believed that the clay was ground, dried, and stored in the two frame buildings, while the actual brick making machinery was housed in the brick structure.

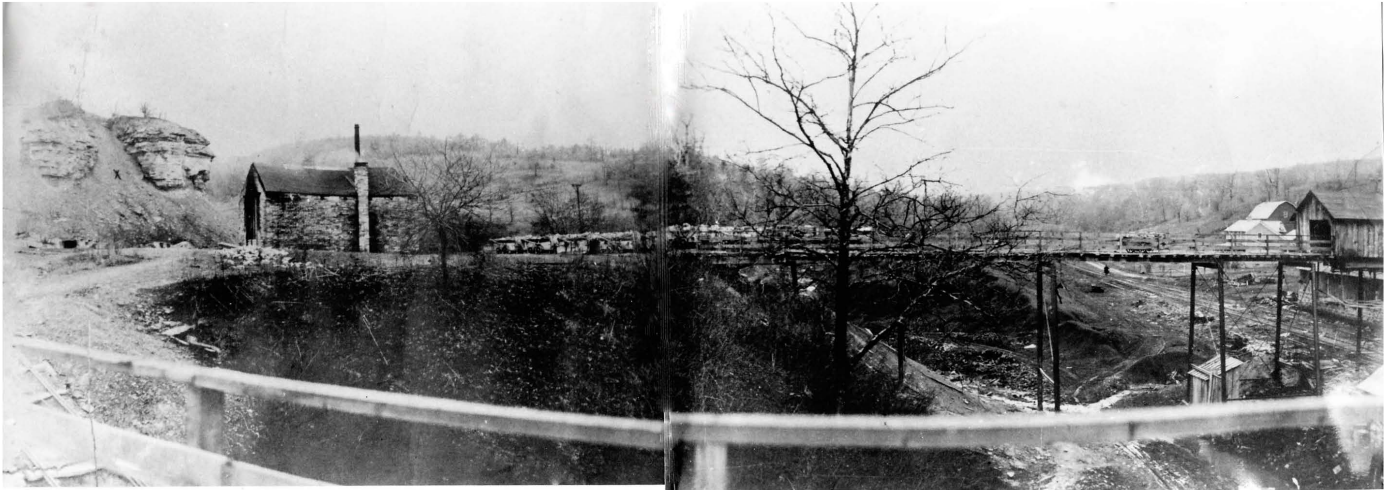


Mid-section of Lloyd Nixon Photograph

There is some evidence suggesting that the central, frame building may have been replaced by a brick structure subsequent to the available contemporary illustrations of the plant, as discussed below.

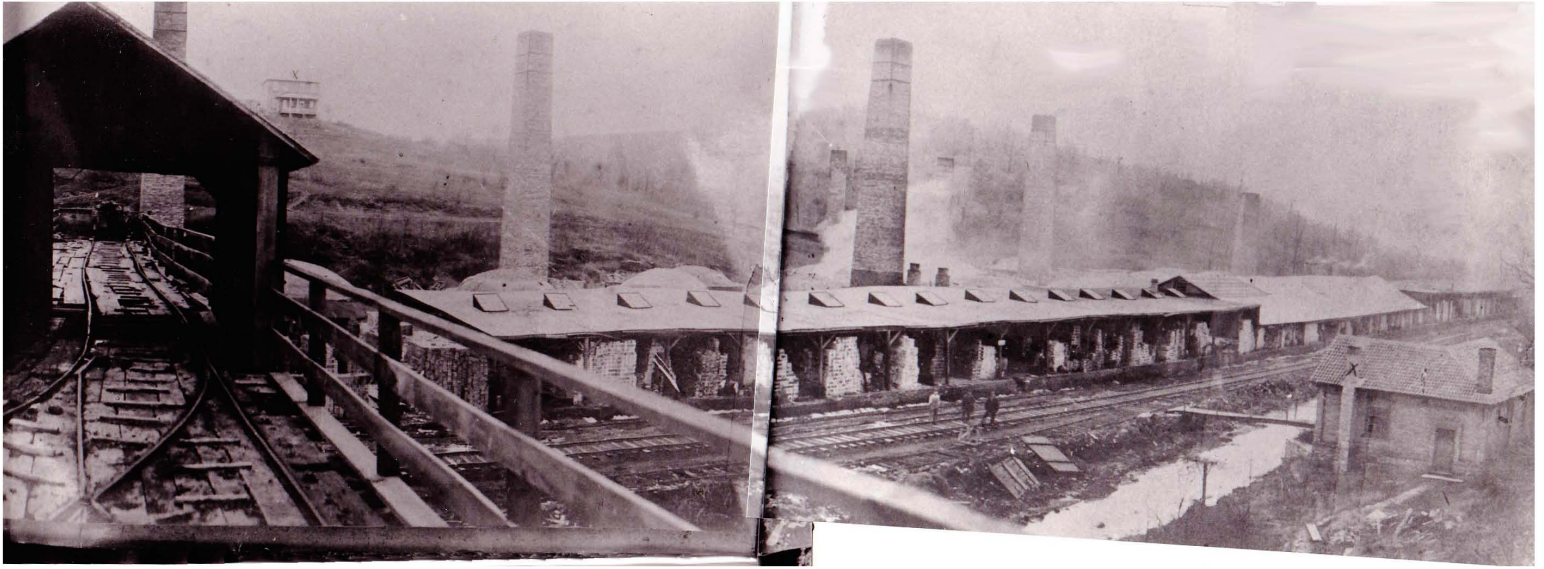
Between the railroad and Rock Run to the east was a small, one story brick building, possibly a wash house, although its function remains speculative. A raised rail trestle crossed Rock Run and entered the top story of the middle of these three buildings, undoubtedly for the purpose of delivering clay (p. 96, 98). The left hand portion of the Nixon photograph (p. 98) shows a frame privy along the creek bank beneath this trestle. A second small brick building stood on the hilltop above the east side of Rock Run and at the eastern end of the smaller rail trestle and probably served to house equipment, as it appears to have large doors at either end and lies adjacent to the active clay pit.





Left Hand Section of Lloyd Nixon Photograph Showing Smaller Trestle. “Big Rock” at Left.

A second, more substantial rail trestle crossed Rock Run to the north of these buildings, presumably to deliver coal and/or clay. From this point northward, a series of three elongate open brick storage or drying sheds stood between the railroad on the east and a series of seventeen round, bee-hive brick kilns on the west (p 99). Structures on the east side of Rock Run were limited to a small brick el-shaped building just below (north of) the large trestle, and a coal tipple, although the latter may have been related to later coal mining activity at the site.



Right Hand Portion of Lloyd Nixon Photograph  
Note Kilns Behind Storage or Drying Sheds

### Southern Portion of Project Area (1)

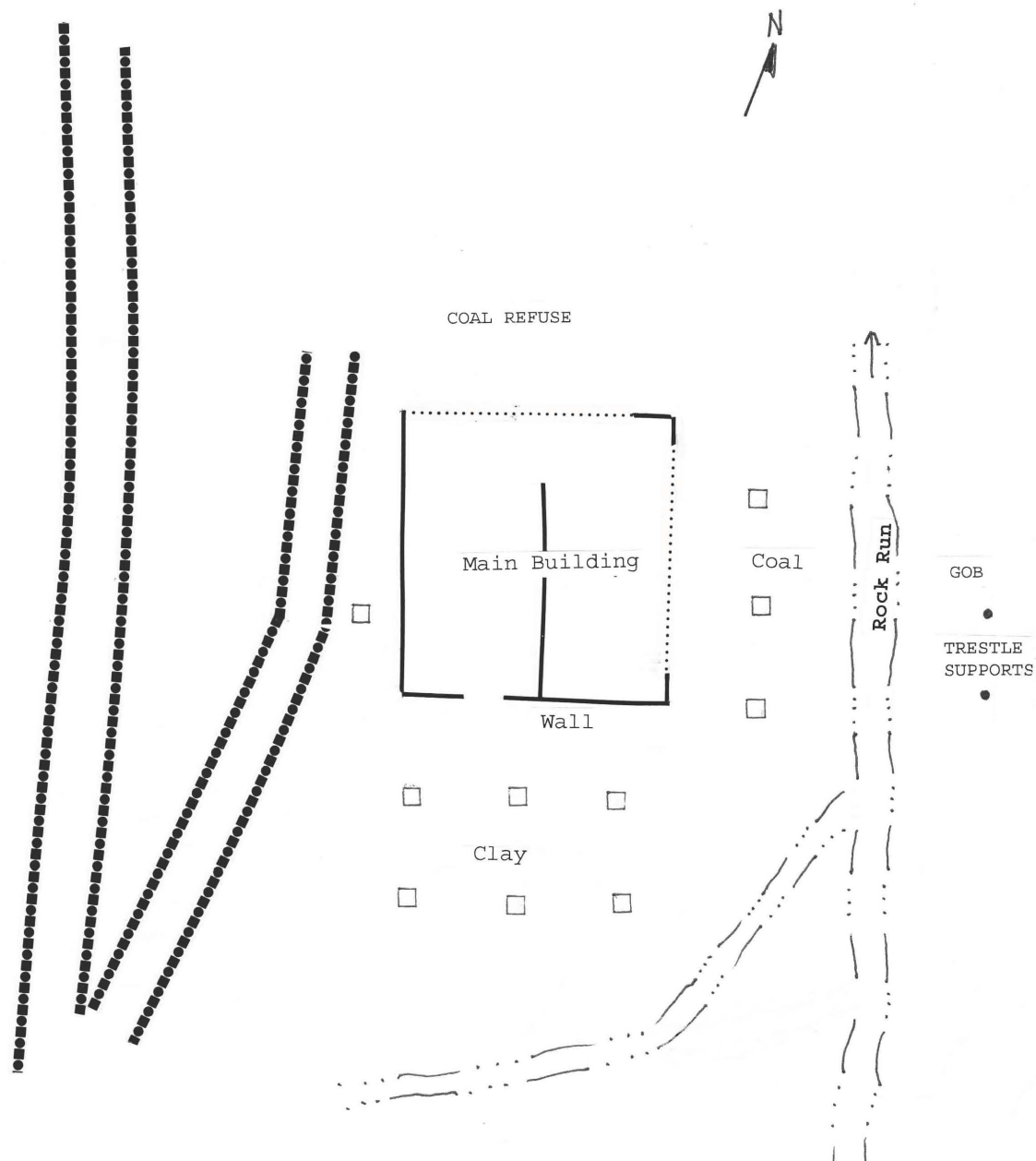
At the time of the survey (1997), the southern portion of the project area was dominated by two features: a massive disturbance in the form of a wide lane leading from the township road to Rock Run and the partial remains of a brick wall and ancillary foundations measuring ca. 40 by 40 feet. The wooded area between these two features was traversed by a small stream littered

with recent refuse derived from the township road. Numerous small, irregular hillocks also dotted the wooded area. Upon field examination, these proved to be irregular piles of coal slack and alluvium derived from ditching or cleaning the small tributary of Rock Run and Rock Run itself. The aforementioned lane also exposes abundant coal slack but seemed to be of relatively recent date, as the large scar created by it appears only on the more recent aerial photograph (p. 94).

As this area just east of the sharp bend in the township road is clearly shown in the large photograph of the Ironclay works (p. 98) to have been unutilized by the brick works, except for the Rock Run railway spur right-of-way, irregular hillocks of coal waste are presumed to be due to subsequent activity associated with coal mining. A series of six shovel test units was excavated in this wooded area, as indicated on Map X. For the most part, these revealed nothing but large quantities of coal slack and occasional brick frag-



ments mixed in the disturbed topsoil, which was ca. 10-12 cm deep. Several units near the standing brick wall included small, irregular masses of gray, plastic fireclay, supporting the



contention that the frame structure shown at the south end of the Ironclay buildings was in fact used to store or weather the coal underclay before it was molded into brick. It is to be emphasized that these small masses of coal underclay are incorporated in disturbed topsoil and do not represent an *in situ* bedrock deposit of fireclay or alluvial clay. Rock Run at this point exposes massive sandstone outcropping at this elevation, and fireclay utilized by Ironclay Co. came from a horizon well above this sandstone.



Sandstone Outcrop along East Bank of Rock Run at Southern Edge of the Project Area.

Just north of the bank exposing this sandstone rock outcrop, there was a portion of a large mine gob pile that filled the mouth of a former tributary stream and was responsible for the small waterfall shown on the preceding page; material excavated in shovel test units opposite this gob pile wall and consisted of pure coal underclay and not mine gob. The only conclusion to be reached is that the excavated masses of fireclay represent remnants of material originally stored in the frame building located at this spot. No evidence of walls, foundations, or or structural remnants of this building were found, however.



Gob Pile East of Rock Run in Subarea 1  
Note Buried I-Beams near Top of the Gob Pile.



At the northern end of the southern portion of the project area stands a partial wall of the main building of the Ironclay complex. The associated foundations measure ca. 40 by 40 feet, and are made of typical light-colored Ironclay flash brick, as is the standing wall remnant. As portions of two or three walls were knocked inward during demolition, no attempt was made to excavate within the building interior.



North Side of Existing Brick Wall





South Side of Existing Brick Wall

A plan of the foundations is given in Map X. The location of the northern portion of these foundations is approximate, for they have been

severely disturbed by subsequent demolition and earth-moving activities. Additional shovel testing was confined to one unit each on the east and west sides but these revealed only coal slack, brick fragments, and- - on the east side-- coal ash associated with the Rock Run railroad spur. As the western side of the building borders an eroded lane coming from the nearby township road, recent trash is abundant along this side. A fragment of thick milk glass cosmetic cream jar was found in the shovel test unit excavated on this side of the foundations but was not retained, as it was in disturbed topsoil and is probably less than fifty years old.

Examination of the brick foundation remnants suggests that the building was divided north-south into two rooms. A door is indicated near the west end of the south wall. Of more interest, however, is the large bay in the second story, which would appear to correspond with the raised, second-story monitor portion of the clay

storage building that adjoined on the south. Quite probably this bay relates to some internal, overhead mechanism for transporting clay the length of storage building.

This interpretation is supported by the faint remnants of roofing tar (unfortunately not visible in photographs) that indicate the juncture of the sloped first-story roof of the clay storage building with the existing brick wall of the main building. Metalwork at the top of the remaining wall indicates a gabled roof, consonant with existing photographs, except that the height of the existing wall appears to be significantly greater than that of the brick building shown in the photo on p. 96. As a consequence, it is believed that the frame "middle" building in this photograph was replaced by a brick structure. While there is no documentary evidence for this supposition, it is the most logical explanation consistent with the perceived difference in height of the

preserved brick wall and that of the brick building shown on p. 96, combined with evidence of a large second-story bay in the existing brick wall and the roofing tar traces which indicate that the adjacent building to the south had a monitor-style roof. Alternatively, the middle frame building may have been removed and the monitor-roofed clay storage building extended northward to the brick building.

A further complication is the fact that the brick building shown on p. 96 appears to be nearly square, as are the estimated dimensions of the existing brick foundations; yet, historic photographs show that the brick building and the adjacent frame building to the south were distinctly rectangular in plan. It is not possible to resolve these discrepancies on the basis of existing evidence; but neither is additional excavation at the site likely to resolve the problem.



The bed of Rock Run at this point may have been shifted westward somewhat by the incremental- enlargement of the gob pile along the west side, explaining the lack of any evidence of the wooden privy and small brick building shown on p. 95 and 97. (In any case, the privy



I-Beam Supports for Tram/Trestle Looking West

probably simply emptied into the adjacent creek.) Partly buried in the gob pile are the bases of three iron I-beams that clearly represent supports for the railroad trestle used to supply clay (p. 109). These I-beams are about eight inches wide and were spaced thirteen feet apart. Although the rusted beams are of little intrinsic interest, locating them does serve to provide an important landmark useful in estimating the locations of other known structures at the Ironclay site.

## Central Portion of Project Area (2)

The central portion of the project area has been heavily disturbed and contains only one feature of interest, a concrete and brick cradle lying on the east side of Rock Run, at the present stream crossing. This structure was undoubtedly used to support a large gas or oil drum (p. 111), and brick used in its construction are definitely an Ironclay product. The cradle measures about nine by twenty feet and consists of four concrete slabs 1 1/2 feet thick and nine feet long, the tops

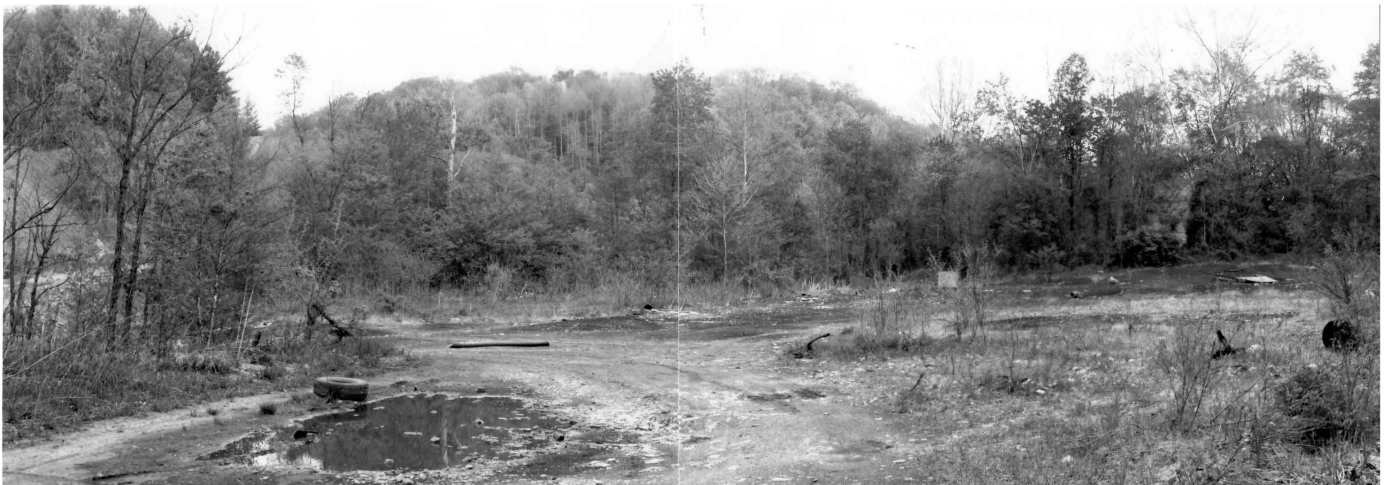


### Cradle Remnants for Oil or Gas Tank

bearing a brick-lined concavity on which a large drum rested. The cradle can be discerned in the later aerial photograph of the site (p. 94) but does not appear to be shown in the 1938 photo (p. 87). It is very likely that this represents the 12,000 gallon oil tank mentioned in the 1936 Ironclay sale advertisement (p. 85), for many clay plants

would switch from coal to oil fuel at one time or another. It is also possible that the drum or tank housed gasoline fuel for trucks.

The western side of Rock Run at this point is entirely covered with eroded coal slack and presumably represents the major portion of the area impacted by later coal preparation (washing) activities, although coal fines appear to have been carried a short distance downstream, choking the valley of Rock Run in the northern portion of project area.



Central Portion of Project Area Looking Southeast



## Central Portion of Project Area Looking Southwest

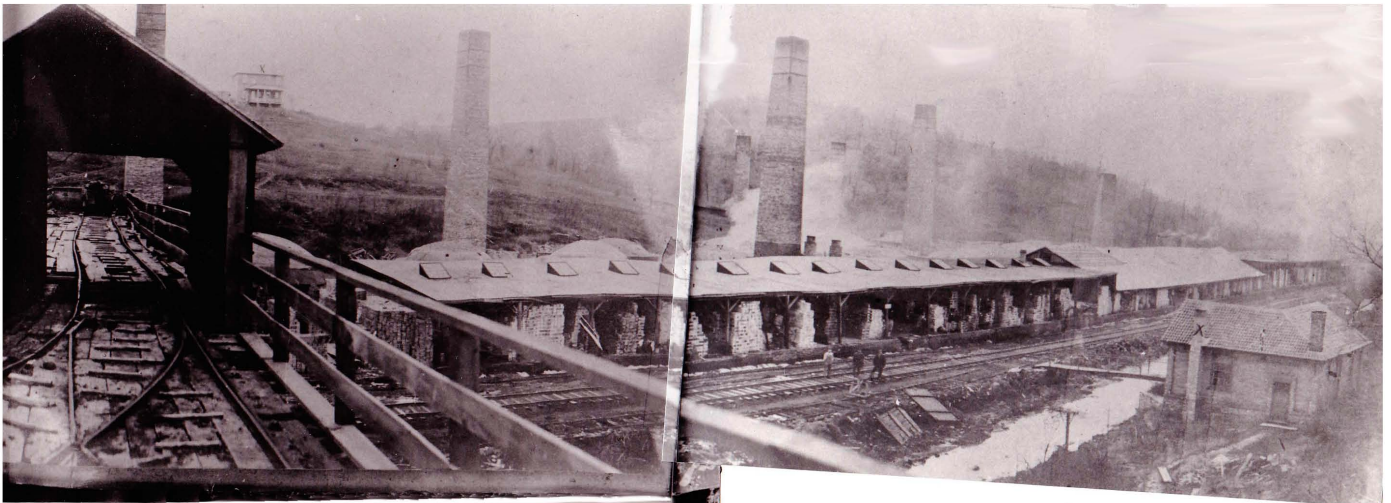
Contemporary photographs indicate that the main Ironclay trestle crossed Rock Run in the central portion of the project area and that several of the bee-hive brick kilns were also located here, relatively close to the existing township road. Because of extensive disturbance by the coal-washing activities, as well as by development of the existing access road running through the area occupied by the kilns, and the likelihood that no significant remains or other data pertaining to the kilns could be recovered by test excavations, shovel testing was confined to a single unit along the eroded northern edge of the access road at

the stream crossing. Beneath the top layer of mixed coal-slack, soil, and brick fragments, ca. 0.25 m. thick, stream alluvium was exposed, indicating that no deeply buried structural remains occur in this area. Sheet erosion across the area of abundant coal slack deposits indicates that they represent a relatively thin surface deposit ca. 15 cm thick, lying upon disturbed soil containing abundant brick fragments.

Regrettably, no evidence for the large railroad trestle shown on p. 99 and 115 was found, although it must have stood in this portion of the project area. Using the house shown on the western hillside, it is believed that this trestle stood approximately where the existing access road crosses Rock Run. Heavy use of this road and development of gob pile along the east side of the creek may be responsible for removing any evidence of this trestle.



## Northern Portion of the Project Area (3)



### Right Portion of Nixon Photograph.

Note house on hill, small building on east side of Rock Run, storage shed, kilns and chimneys

Only a few feet to the north of the gas or oil-tank cradle are remnant foundations of the small, el-shaped brick building shown in the Nixon photograph (above). The smaller el now lies several meters from Rock Run, although the interval is clearly filled with recent alluvium and appears to be due to excess sediment derived from the erosion of the nearby gob pile but quite



### Small El-shaped Brick Building East of Rock Run

likely exacerbated by coal-washing activities. The smaller el- measures eight feet square and the larger seventeen feet square. Only portions of the foundation remain, but it is clear that the structure was made of typical Ironclay flash brick. Excavation of two shovel test units within the confines of the foundation outline found brick



fragments and a few pieces of wood and asphalt roofing material ("tarpaper"). Beneath leafmold, only ca. 4-6 cm. of topsoil existed above clean alluvial silt and sand; it is evident that the structure had no basement. Function of this building remains unknown, and no artifact material was recovered that might provide a clue. From the photo (p. 115) it is evident that access to the building was provided by the simple expedient of a plank placed across Rock Run.

The bed of Rock Run has shifted substantially to the west, completely removing the tracks of the Rock Run branch railroad. The stream's migration in this direction appears to have been stopped only by the brick floor of the Ironclay brick storage sheds, the eastern edge of which is responsible for the very regular western stream bank shown on p. 118.

Visual inspection of this brushy area lying immediately north and west of the stream crossing revealed a concrete floor approximately 23 by 40

feet, lying about twenty feet west of the edge of Rock Run and bordered on the west by the existing recent access road. Shovel-testing along the eastern side of this concrete floor revealed a solid brick floor extending eastward to the creek and approximately fifty feet beyond the concrete floor. While the concrete floor is clearly somewhat later than the underlying brick floor, it



Northern Area 3) Looking Northwest

is still believed to have been part of the Ironclay operation. At the northern end of the brick flooring, a small hillock of mixed soil and brick fragments seems to derive from an adjacent depression littered with recent trash (p. 120). No



Concrete and Brick Floor of Ironclay Storage Shed  
Looking North

evidence of structural remains are associated with this shallow, water-filled depression, which may represent an office associated with an adjacent double ramp believed to mark the location of a set of truck scales. A shovel test excavation revealed only brick fragments and very recent trash. The concrete ramps, shown on p. 121 are placed diagonally in relationship to the existing access road, to the brick floor of the Ironclay



Trash-filled Depression Possibly Site of Scale House



## Remnants of Concrete Scale Ramps Coal Tipple Foundations in Background

brick storage shed and to the Rock Run railway extension (Map XI, p. 126) and are not believed to be associated with operation of the Ironclay brick plant. Far more likely they were used for weighing truckloads of coal and are associated with the later Sidwell coal operations. The northern ramp measures about 33 feet long and

eight feet wide; the southern ramp is the same width but only eleven feet long. They are about thirty feet apart but the interval is filled with mounds of recent refuse material.

Possibly associated with this weigh station are the remnants of the concrete footers for a coal tipple lying just to the northeast, along the eastern bank of Rock Run (p. 121, 123). This tipple does appear to be shown on the 1938 aerial photograph, however, and it may have been used during the later operations of the brick factory, replacing the older trestle shown on p. 99 and 115. The area to the north of the weigh station has been impacted by recent refuse disposal, demolition of the old brick kilns, and sedimentation attributed to the Sidwell coal operations, unconfined by the brick work lying to the south, Rock Run here has clearly meandered across the project area, depositing a thick layer of iron-stained marsh alluvium that has killed a number of small trees. The eastern portion of this





## Coal Tipple Foundations East of Rock Run

portion of the project area is so marshy that one sinks up to the boot tops, and no attempt was made to shovel test. In stark contrast, to the west, on the other side of the existing access road, the ground surface consists of an irregular pavement of broken brick, the result of demolition of the Ironclay kilns. This area was closely examined

in an attempt to locate the actual site of any of the old kilns. One roughly circular, water-filled depression (below) probably does represent the site of one of the bee-hive kilns, but it is so poorly preserved that excavation would not reveal any significant information on the structure.



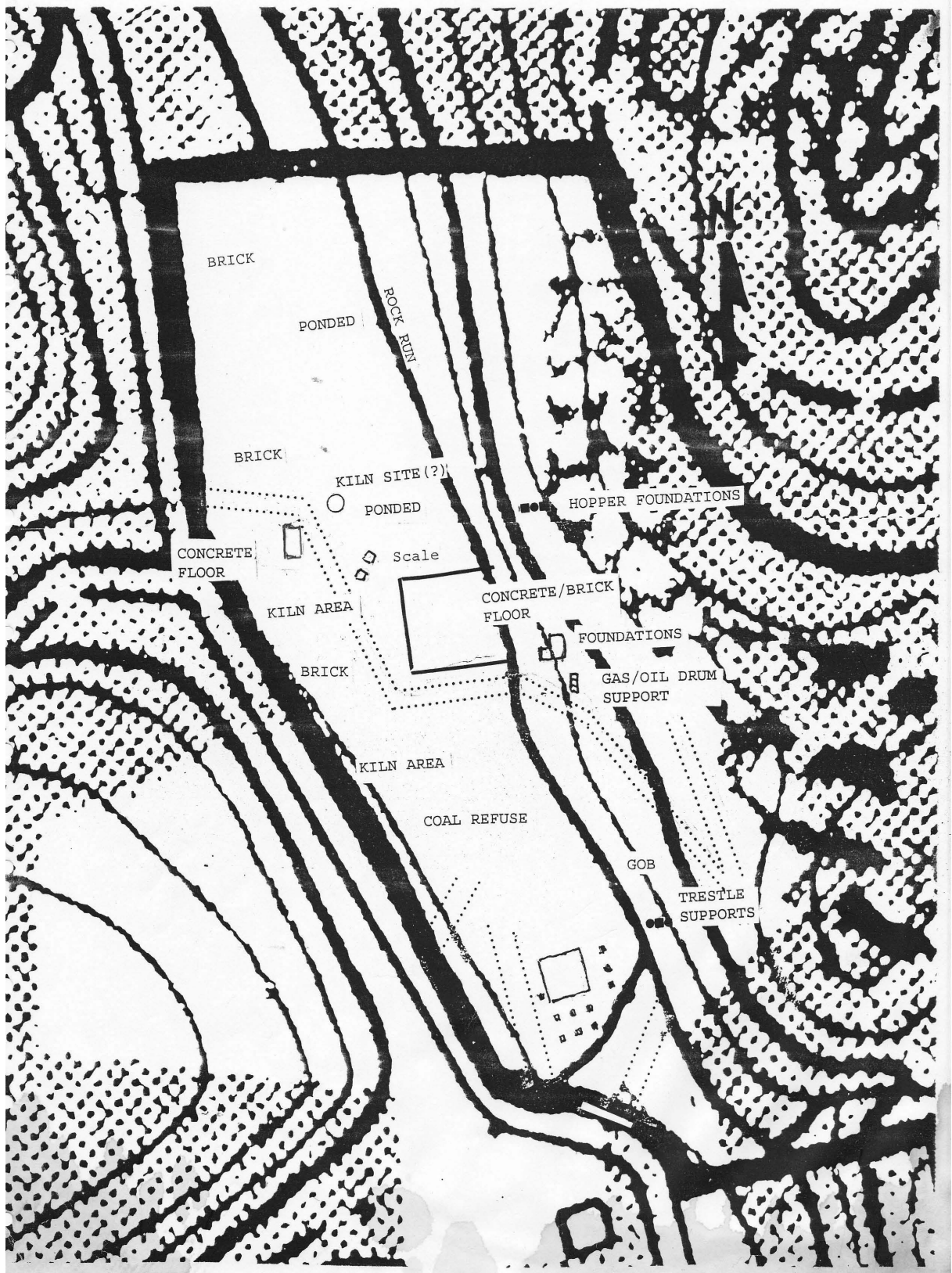
Probable Kiln Site North End of Ironclay Plant  
Looking Southwest





Rock Run Work Crew (Courtesy Little City Archives)

Photographic evidence indicates that these were all typical downdraft bee-hive kilns, in every way comparable to existing kilns [since demolished] at the Straitsville Impervious Brick Co. site at New Straitsville. Demolition of the kilns along Rock Run, not to mention subsequent disturbance by development of the existing access



Map XI

road through the area where the kilns stood appears to have been so thorough that it is unlikely even complete excavation of site would reveal significant, information on the size, distribution, or even the number of kilns. Some idea of the size of the kilns can be gained from a photograph (p. 125) of Ironclay crew preserved in the Little City Archives (Shawnee, Ohio).

Finally, a small concrete pad measuring ca. twelve by 5 feet was noted along the western side of the existing access road, at the northern edge of the site (Map XI). Its function remains undetermined. The rest of the area between the present access road and the abrupt hill-side slope upward to the township road is covered with concrete rubble and brick debris, clearly derived from demolition of the kilns. Mounding of this debris has created a narrow, ditch-like depression adjacent to the hillside, and this has subsequently served as a catchment for recent refuse deposited from or discarded along the township road above.

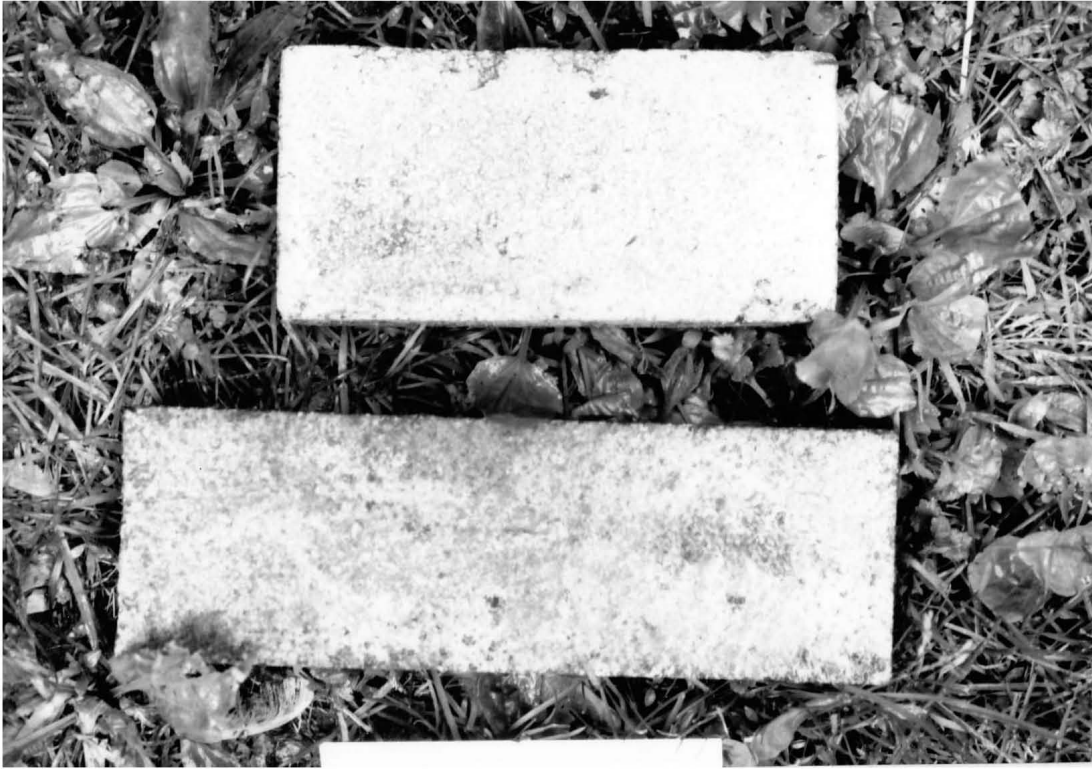
In summary, several recognizable remnants of the Ironclay brick plant have been identified in the Phase I survey and serve to corroborate the visual evidence of the plant layout provided by contemporary illustrations. Subsequent use of the site for coal preparation has heavily impacted these remains, as has the development of the adjacent gob pile and the recent access road, which traverses almost entire length of the area actually occupied by the brick kilns. Finally, deliberate demolition of the kilns and chimneys has destroyed any significant remnants of the brick plant and rendered it either impossible or exceedingly impractical to obtain additional data on the plant layout by ordinary methods of archaeological excavation. Utilization of such expensive archaeological techniques as ground-penetrating radar, infra-red aerial photography, etc., does not seem to be a reasonable alternative to further excavation, given the likelihood that such study would not result in significant additions to our understanding of the Ironclay plant layout or its history.

## Plant Products

A major aim of the Phase I survey was to document the types of ceramic materials produced at the Ironclay brick plant and, if possible, identify products of the two earlier brick plants.

The sheer abundance and ubiquity of broken and whole yellow, iron-spotted brick, as well as its utilization in two structural remnants identified as part of the Ironclay complex, left little doubt as to the major product of the Ironclay plant. These were plain, unmarked and unornamented face brick.

In addition, discovery of an undated Ironclay Brick Co. catalog in the Ohio Historical Society's Archives-Library removed any doubt about the nature of the fancier, ornamental brick designs manufactured by the Ironclay company. A perp-



The Most Common Ironclay Brick Co. Shapes Found  
the Rock Run Plant Site



Ornamental Brick from Rock Run Site





**No. 215.**  
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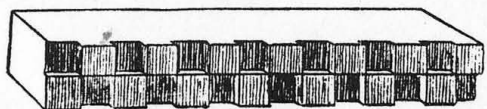
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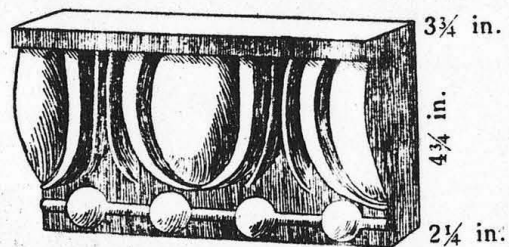


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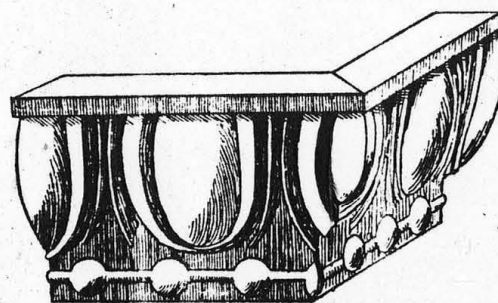


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**No. 504. Mitred.**



lexing feature was the dearth of specialty or ornamental brick found at the site, although these were amply illustrated in the catalog. Only along the northern edge of the project area and in the wooded area just to the north of it were a number of such brick found among waster material and in the stream bed of Rock Run (p. 130, 132). No explanation is offered for this apparent restriction in distribution, although it may be noted that much of the broken brick distributed along the western side of the northern and central portion of the project area undoubtedly derived from the actual kilns.

A particular attempt was made to document the relative distribution of marked Parto Block and Rock Run Pavers, in an attempt to locate physical remnants of the Standard Brick and Terra Cotta Co. plant that produced these paving block. In the event, broken examples of these brick were found scattered throughout site and even along access road leading up into the gob pile east of Rock Run. The only concentration of



## Unusual Brick Shapes from Northern End of the Ironclay Brick Co. Site

these earlier products seemed to be hillock of earth and brick bats excavated for possible weigh station. Shovel-testing in this area, however, revealed clean alluvium below the brick floor of the Ironclay brick storage sheds, making it unlikely that any discrete remnants of the earlier

brick plant lie beneath Ironclay remnants. The extremely scattered nature of the Parto and Rock Run Paver finds is an additional indication that no discrete remnants of this earlier factory, which was destroyed by fire in 1894/95, remain.

## CONCLUSIONS AND RECOMMENDATIONS

Phase I study of the Ironclay Brick Co. project area has documented the history and existing remnants of this early 20th C. brick works, as well as its products. The site has been severely impacted by subsequent use in coal-mining and coal preparation, as well as by the deliberate demolition of the Ironclay structures, including all of the kilns, and, to a lesser extent, by shifting the channel of Rock Run.

Limited Phase I field reconnaissance indicates that, it is very unlikely that additional testing or excavation would yield significant additions to our knowledge of the plant layout or operation.

Evidence of the earlier (late 19th C.) Standard Brick and Terra Cotta Co. activities is limited to a few broken examples of its marked paving brick. Two broken “double-star” sidewalk bricks from the northern end of the site are attributed to the Standard Brick company with some confidence, although they lack any archaeological context.



Standard Brick and Terra Cotta Sidewalk Bricks

Poor visibility and focus (U.S. Dept. of the Interior 1991) render it difficult to interpret relative age and/or function of several of the structural remnants, and the complicated history of the site makes it unlikely that additional study would add significantly to our knowledge of the Ironclay site.

Although active brick and or structural clay products plants have virtually disappeared from the Ohio landscape, a few excellent examples still remain nearby, such as the Logan Clay Products Co. plant at Logan. It is believed that efforts at documentation and preservation of such well-preserved examples would be time and effort better spent than further excavation and documentation of the largely redundant information available at the Ironclay site. Consequently no further study is recommended.

## U. S. Army Corps of Engineers Summary

The 13-acre Rock Run/Seven Chimneys coal refuse pile was a stark remnant of the Straitsville Impervious Brick Company and was located near New Straitsville. The 13-acre site consisted of an abandoned valley-fill coal washing facility with a 60-foot coal-waste dam on Forest Service property. The Monday Creek partners chose the exposed dam materials and coal slurry as their first major reclamation project in 1996. The project capped the site with an impervious layer containing a mixture of coal-combustion by-product materials and local soils. The engineering design utilized innovative wetland restoration alternative systems and the implementation of positive drainage to reduce erosion and acidification of fresh water. The project was completed in the spring of 1999. Recent measurements at this site indicate surface water with a neutral pH and low concentrations of metals and acid. (U. S. Army Corps of Engineers 2005: 18)

## Back to Big Rock

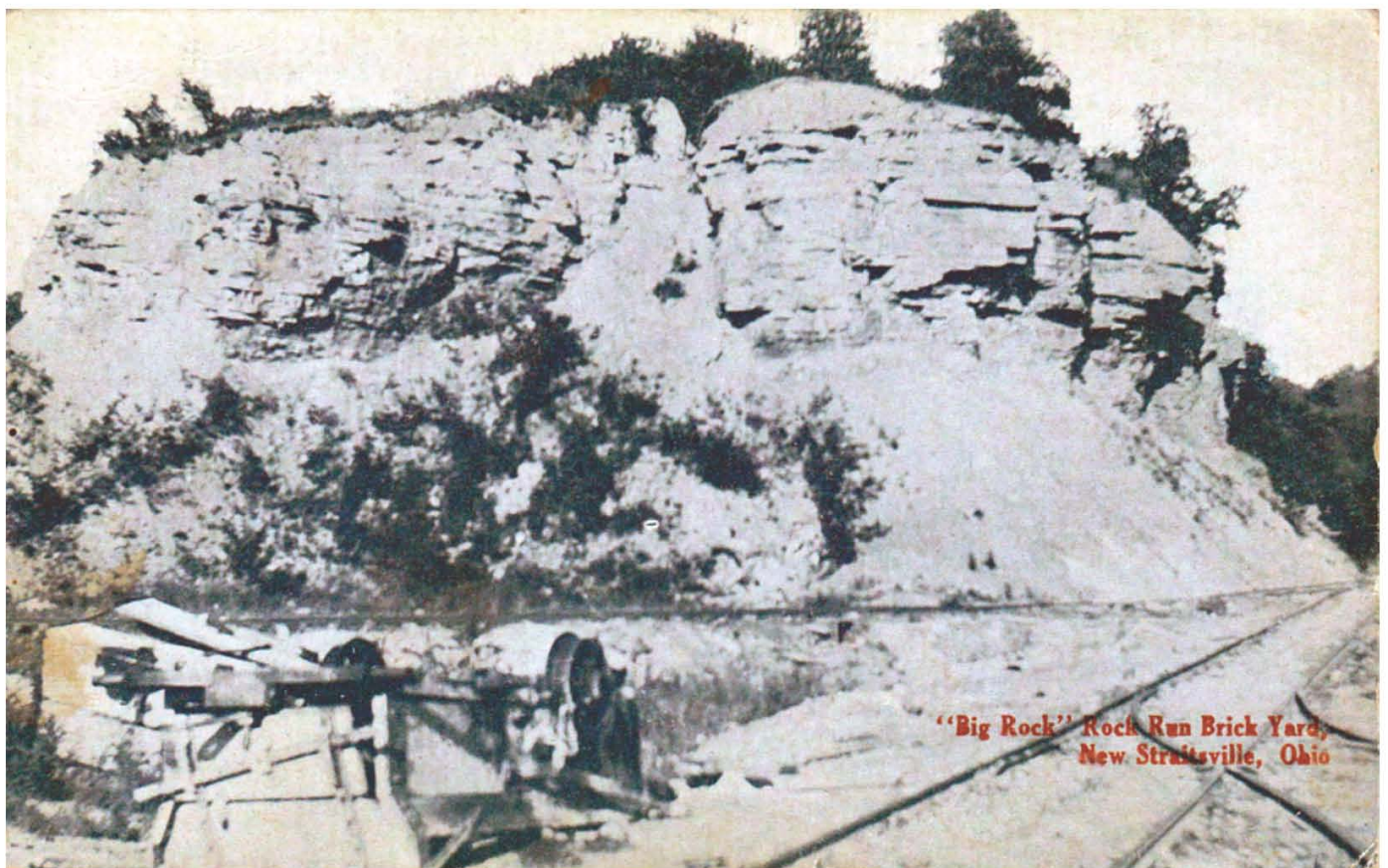
As can be seen from the U. S. Army Corps of Engineers, the recommendations of the original 1997 version of this report were followed, so that restoration of the impacted area was completed by the spring of 1999.

During the Phase I field work, one feature that was noticed but not commented upon was a large, looming outcrop of sandstone and shale on the hilltop east of the smaller trestle, as shown in the left portion of the Lloyd Nixon photograph (p. 98). To what extent this huge bluff was natural and to what extent it was created by artificial excavation attendant to coal and clay mining is difficult to say, but the feature was not addressed in the original report.

Therefore, it was with some surprise that in January, 2011, a postcard view of this feature, labeled “Big Rock Rock Run Brick Yard New



Straitsville, Ohio” was found. Geologically, the view on the postcard is of interest because it indicates that the left portion of Big Rock, in which the strata can be seen to lie at an angle, almost certainly represents a large, pene-contemporaneous slump block. Historically, this



Undated Post Card View of “Big Rock”

view is of interest as it clearly was taken while the plant was still in operation, as witnessed by the rail tracks and what appear to be overturned clay cars. The site has been informally referred to as “Seven Chimneys” (curious in itself as the drawing of the Ironclay brick plant shows eight large stacks), there are no known contemporary references to the place as “Big Rock.” And, rather sadly, “Big Rock” was reclaimed in 1999.



Site of Big Rock 2011





Post-Reclamation View Across Rock Run Looking  
Toward the Site of Big Rock

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